Chemical Analysis Report

SO-DIST-2019-07-10-01

Florida Department of Environmental Protection
Central Laboratory
2600 Blair Stone Road
Tallahassee, FL 32399-2400
DOH Accreditation E31780

Event Description: **P Cricks 1**
Request ID: **RQ-2019-07-01-48**
Customer: **SO-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FLDEP South District Office
2295 Victoria Ave. Suite 364
Fort Myers, FL 33901-3381
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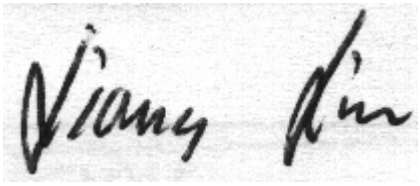
Certified by: Liang Lin, Environmental Administrator

Date Certified: 06-AUG-2019 13:57



Case Narrative

Unless otherwise noted, all samples included in this report were received in accordance with protocols referenced in Chapter 62-160, Florida Administrative Code (F.A.C.). Results published in this report pertain only to the samples as submitted to, and received by the laboratory. All times in this report are adjusted to the applicable Eastern Time Zone (EST or EDT).

Results for the following analytical groups are included in this report: Metals, Nutrients and Pesticides.

Scientific notation may be used in reporting very large or small values. Values reported using scientific notation will take the form of the following example: 1.3E+03, which is equivalent to 1.3×10^3 or 1300.

Unless otherwise noted, analytical values for soil and sediment samples are reported on a dry weight basis, and analytical values for waste and tissue samples are reported on a wet weight basis.

Results for TNI accredited tests met requirements established by The NELAC Institute. A double asterisk (**) is used to indicate an analyte/matrix/method for which the laboratory is not TNI accredited by the Florida Department of Health Environmental Laboratory Certification Program or where accreditation for that field of testing is not applicable.

Any significant anomalies or deviations from established protocols are documented in Non-Conformance Reports, which, where appropriate, are included within this analytical report. Additional comments related to specific analytical tests may be included as remarks following the analytical results for each sample. Such comments and remarks are for informational purposes only and are not intended to convey judgement about the usability of the reported data.

A quality control report on the performance of the test method for the submitted samples is included. Uncertainty associated with the analytical results contained in this report can be estimated from the reported quality assurance results and from published quality control acceptance limits for each analytical test. Matrix quality control results (matrix spike recoveries and matrix sample precision) pertain only to the matrix sample tested and do not necessarily reflect test method performance for other samples.

Typical matrix quality control (QC) measurements may include matrix spike recovery, matrix spike duplicate recovery, matrix spike precision and matrix sample precision. Not all matrix QC results may be available or reportable; where they are not an explanation is provided. Typical reasons for unavailable QC results include, but are not limited to, a) insufficient matrix sample to perform some or all QC measurements; b) analyte concentration in the sample replicated was too low for a meaningful measurement of precision and c) analyte concentration in the matrix sample spiked was too high (relative to the amount of analyte spiked) for a meaningful measurement of recovery. Where matrix QC results are unavailable, other method performance metrics (e.g., LCS recovery, LCS precision, surrogate recovery) may be used to assess performance of the method. Comments explaining any missing QC measurements are not intended to convey any adverse conclusions about the quality of the reported data.

Precision is reported as relative percent difference unless otherwise noted.

Quality Control codes as defined below may be used in this report to indicate results that are associated with one or more quality control elements which did not fall within established test method criteria. Such results may be qualified as estimates using a J qualifier as required by 62-160 F.A.C. Explanations are included in the report for any results that were reported as estimates for other reasons.

QC Codes used in this report may include:

LCS – Recovery for the batch Laboratory Control Sample (LCS) was outside existing control limits;
MS – Recovery for the batch matrix spike (MS) was outside existing control limits;
CCV – Recovery for a continuing calibration verification (CCV) standard was outside existing control limits;
SUR – Recovery of a surrogate (SUR) for associated analytes was outside existing control limits;
RPD – The precision, measured as relative percent difference (RPD), of batch replicate measurements was outside existing control limits;
RSD – The precision, measured as relative standard deviation (RSD), of batch replicate measurements was outside existing control limits;
SMP – Sample - used precision derived from replicate analyses of a sample;

The following data qualifiers are used, where applicable, in this report as specified in 62-160 F.A.C.

A - Value reported is the mean of two or more determinations.
B - Results based on colony counts outside the acceptable range.
I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J - Estimated value and/or the analysis did not meet established quality control criteria.
K - Actual value is known to be less than value given.
L - Actual value is known to be greater than value given.
N - Presumptive evidence of presence of material.
O - Sampled, but analysis lost or not performed.
Q - Sample held beyond normal holding time.
T - Value reported is less than the criterion of detection.
U - Material was analyzed for but not detected. The reported value is the method detection limit for the sample analyzed.
V - Analyte was detected in both sample and method blank.
X - Too few individuals to calculate SCI value.
Y - The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate.
Z - Colonies were too numerous to count (TNTC).

Quality control information from overflow laboratories may not be included in this report. Please refer to the associated report from the overflow laboratory for additional information.

Sample Location: Shell Cr@HathawayPark **Collection Date/Time: 07/09/2019 09:30**

Field ID: G3SD0120 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2101318	EPA 180.1 Rev. 2.0	Turbidity	3.3		NTU	P366980	
	EPA 300.0 Rev. 2.1	Chloride	140		mg Cl/L	P367221	
		Sulfate	66		mg SO4/L	P367223	
	SM 2120 B	Color (true)	63		PCU	P366994	
	SM 2320 B-97	Total Alkalinity	175		mg CaCO3/L	P367446	
	SM 2540 C-97	TDS	545		mg/L	P367493	
	SM 2540 D-97	TSS	3	I	mg/L	P367508	
	SM 4500 F-C-97	Fluoride	0.23		mg F/L	P367450	
2101321	EPA 350.1 Rev. 2.0	Ammonia-N	0.022		mg N/L	P367713	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.1		mg N/L	P367152	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.036		mg N/L	P367046	
	EPA 365.1 Rev. 2.0	Total-P	0.14		mg P/L	P367155	
	SM 5310 B-00	Organic Carbon	15		mg C/L	P367344	
2101324	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.082		mg P/L	P366987	
2101350	EPA 8321B	Aldicarb	0.020	U	ug/L	P366931	
		Aldicarb Sulfone	0.0020	U	ug/L	P366931	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P366931	
		Carbaryl	0.0020	U	ug/L	P366931	
		Carbofuran	0.0020	U	ug/L	P366931	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P366931	
		Methiocarb	0.0020	U	ug/L	P366931	
		Methomyl	0.0020	U	ug/L	P366931	
		Oxamyl	0.0020	U	ug/L	P366931	RPD
		Propoxur	0.0020	U	ug/L	P366931	
2101353		2,4-D	0.072		ug/L	P366930	
		Acesulfame K**	0.10	U	ug/L	P367009	
		AMPA**	0.80		ug/L	P367009	
		Sucralose**	0.010	U	ug/L	P367009	
		Acetaminophen**	0.0080	U	ug/L	P366930	
		Endothall**	0.25	U	ug/L	P367009	
		Glufosinate**	0.10	U	ug/L	P367009	
		Glyphosate**	1.2		ug/L	P367009	
		Bentazon	10E-04	I	ug/L	P366930	
		Carbamazepine**	8.0E-04	U	ug/L	P366930	
		Diuron	0.027		ug/L	P366930	
		Fenuron	0.016	U	ug/L	P366930	
		Fluridone**	0.096		ug/L	P366930	
		Imazapyr**	0.017		ug/L	P366930	
		Hydrocodone**	0.0020	U	ug/L	P366930	
		Ibuprofen**	0.020	U	ug/L	P366930	
		Imidacloprid	0.35		ug/L	P366930	MS
		Linuron	0.0040	U	ug/L	P366930	
		MCPP	0.0020	U	ug/L	P366930	MS

Field ID: G3SD0120 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2101353	EPA 8321B	Naproxen**	0.0080	U	ug/L	P366930	
		Primidone**	0.0040	U	ug/L	P366930	
		Pyraclostrobin**	0.0020	U	ug/L	P366930	
		Triclopyr**	0.0040	U	ug/L	P366930	
2101358	EPA 8270E	Aldrin	4.2	U	ng/L	P366942	
		Alpha-BHC	2.1	UJ	ng/L	P366942	LCS
		Alpha-Chlordane	1.1	U	ng/L	P366942	
		Beta-BHC	11	U	ng/L	P366942	MS
		Bifenthrin**	4.2	U	ng/L	P366942	
		Delta-BHC	8.5	U	ng/L	P366942	
		Gamma-BHC	8.5	U	ng/L	P366942	
		Carbophenothion	11	U	ng/L	P366942	
		Chlorothalonil	2.1	U	ng/L	P366942	
		Cis-Nonachlor**	1.1	U	ng/L	P366942	
		Cypermethrin	21	U	ng/L	P366942	
		DDD-p,p'	6.3	U	ng/L	P366942	
		DDE-p,p'	6.3	U	ng/L	P366942	
		DDT-p,p'	7.4	U	ng/L	P366942	
		Dicofol	32	U	ng/L	P366942	
		Dieldrin	4.2	U	ng/L	P366942	
		Endosulfan I	4.2	U	ng/L	P366942	
		Endosulfan II	4.2	U	ng/L	P366942	
		Endosulfan Sulfate	2.1	U	ng/L	P366942	
		Endrin	2.1	U	ng/L	P366942	
		Endrin Aldehyde	2.1	U	ng/L	P366942	
		Endrin Ketone	2.1	U	ng/L	P366942	
		Ethalfluralin**	3.2	U	ng/L	P366942	
		Gamma-Chlordane	1.1	U	ng/L	P366942	
		Heptachlor	1.6	U	ng/L	P366942	
		Heptachlor Epoxide	2.1	U	ng/L	P366942	
		Hexachlorobenzene**	2.1	U	ng/L	P366942	
		Methoxychlor	4.2	U	ng/L	P366942	
		Mirex	2.1	U	ng/L	P366942	
		Permethrin	11	U	ng/L	P366942	
		Trans-Nonachlor**	1.1	U	ng/L	P366942	
		Trifluralin	2.6	U	ng/L	P366942	
	EPA 8276	Chlordane	5.3	U	ng/L	P366942	
		Toxaphene	32	U	ng/L	P366942	
2101361	EPA 8270E	Acetochlor	0.26	U	ng/L	P367025	
		Alachlor	0.26	U	ng/L	P367025	
		Ametryn	0.62	U	ng/L	P367025	
		Atrazine	6.7		ng/L	P367025	
		Atrazine Desethyl	1.5	U	ng/L	P367025	
		Azinphos Methyl	5.2	U	ng/L	P367025	
		Bromacil	150		ng/L	P367025	

Field ID: G3SD0120 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2101361	EPA 8270E	Butylate	0.41	U	ng/L	P367025	
		Chlorpyrifos Ethyl	0.26	U	ng/L	P367025	
		Chlorpyrifos Methyl	0.10	U	ng/L	P367025	
		Cyanazine	3.4	U	ng/L	P367025	
		Demeton	7.2	UJ	ng/L	P367025	RPD
		Diazinon	0.13	U	ng/L	P367025	
		Dimethenamid**	0.10	U	ng/L	P367025	
		Disulfoton	0.52	UJ	ng/L	P367025	RPD
		Dithiopyr**	0.10	U	ng/L	P367025	
		EPTC	1.3	U	ng/L	P367025	
		Ethion	0.15	U	ng/L	P367025	
		Ethoprop	0.10	U	ng/L	P367025	
		Fenamiphos	0.52	U	ng/L	P367025	
		Fipronil	0.26	U	ng/L	P367025	
		Fipronil Desulfinyl**	0.13	U	ng/L	P367025	
		Fipronil Sulfide	0.15	U	ng/L	P367025	
		Fipronil Sulfone	0.15	U	ng/L	P367025	
		Fonofos	0.21	U	ng/L	P367025	
		Hexazinone	3.9		ng/L	P367025	
		Malathion	0.36	U	ng/L	P367025	
		Metalaxyl	89		ng/L	P367025	
		Metolachlor	11		ng/L	P367025	
		Metribuzin	0.77	U	ng/L	P367025	
		Mevinphos	0.52	U	ng/L	P367025	
		Molinate	0.31	U	ng/L	P367025	
		Norflurazon	520		ng/L	P367025	
		Oxadiazon**	0.15	IJ	ng/L	P367025	
		Parathion Ethyl	0.26	U	ng/L	P367025	
		Parathion Methyl	0.57	U	ng/L	P367025	
		Pendimethalin	1.0	U	ng/L	P367025	
		Phorate	0.26	U	ng/L	P367025	
		Prodiamine**	0.18	U	ng/L	P367025	
		Prometon	2.5	I	ng/L	P367025	
		Prometryn	0.21	U	ng/L	P367025	
		Simazine	50		ng/L	P367025	
		Tebuconazole**	1.0	IJ	ng/L	P367025	RPD
		Terbufos	0.10	U	ng/L	P367025	
		Terbuthylazine	0.44	U	ng/L	P367025	
2101365	EPA 200.7 Rev. 4.4	Barium	43.1		ug/L	P367077	
		Calcium	98.6		mg/L	P367077	
		Iron	190		ug/L	P367077	
		Magnesium	14.7		mg/L	P367077	
		Potassium	7.9		mg/L	P367077	
		Sodium	69.7		mg/L	P367077	
		Zinc	5.0	U	ug/L	P367077	

Field ID: G3SD0120 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2101365	EPA 200.8 Rev. 5.4	Aluminum	46		ug/L	P367077	
		Antimony	0.21		ug/L	P367077	
		Arsenic	1.64		ug/L	P367077	
		Boron**	74.8		ug/L	P367077	
		Cadmium	0.020	U	ug/L	P367077	
		Chromium	0.40	U	ug/L	P367077	
		Copper	0.62	I	ug/L	P367077	
		Lead	0.20	U	ug/L	P367077	
		Nickel	0.98	I	ug/L	P367077	
		Selenium	0.49	I	ug/L	P367077	
		Silver	0.010	U	ug/L	P367077	
		Thallium	0.10	U	ug/L	P367077	

Ref. Method and Comment:
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8321B: MS accuracy for imazapyr could not be assessed due to high concentration of parameter in the spiked sample.
EPA 8270E: Refer to the narrative for an explanation of QC Codes.
EPA 8270E: MS accuracy for hexazinone not assessed due to high content of this parameter in the sample spiked. Refer to the narrative for an explanation of QC Codes.

Sample Location: PrairieCreek@WshgtnLoop **Collection Date/Time: 07/09/2019 10:15**

Field ID: G3SD0067 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2101319	EPA 180.1 Rev. 2.0	Turbidity	5.6		NTU	P366980	
	EPA 300.0 Rev. 2.1	Chloride	84		mg Cl/L	P367221	
		Sulfate	81		mg SO4/L	P367223	
	SM 2120 B	Color (true)	160		PCU	P366994	
	SM 2320 B-97	Total Alkalinity	100		mg CaCO3/L	P367446	
	SM 2540 C-97	TDS	406		mg/L	P367493	
	SM 2540 D-97	TSS	5	I	mg/L	P367508	
	SM 4500 F-C-97	Fluoride	0.31		mg F/L	P367450	
2101322	EPA 350.1 Rev. 2.0	Ammonia-N	0.084		mg N/L	P367713	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.5		mg N/L	P367152	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.32		mg N/L	P367046	
	EPA 365.1 Rev. 2.0	Total-P	0.24		mg P/L	P367155	
	SM 5310 B-00	Organic Carbon	22		mg C/L	P367344	
2101325	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.17		mg P/L	P366987	
2101351	EPA 8321B	Aldicarb	0.020	U	ug/L	P366931	
		Aldicarb Sulfone	0.0020	U	ug/L	P366931	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P366931	
		Carbaryl	0.12		ug/L	P366931	
		Carbofuran	0.0020	U	ug/L	P366931	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P366931	
		Methiocarb	0.0020	U	ug/L	P366931	
		Methomyl	0.0020	U	ug/L	P366931	
		Oxamyl	0.0020	U	ug/L	P366931	RPD
		Propoxur	0.0020	U	ug/L	P366931	
2101354		2,4-D	1.2		ug/L	P366930	
		Acesulfame K**	0.10	U	ug/L	P367009	
		AMPA**	1.9		ug/L	P367009	
		Sucralose**	0.010	UJ	ug/L	P367009	SUR
		Acetaminophen**	0.0080	U	ug/L	P366930	
		Endothall**	0.25	U	ug/L	P367009	
		Glufosinate**	0.10	U	ug/L	P367009	
		Glyphosate**	2.5		ug/L	P367009	
		Bentazon	0.032	I	ug/L	P366930	
		Carbamazepine**	8.0E-04	U	ug/L	P366930	
		Diuron	0.31		ug/L	P366930	
		Fenuron	0.016	U	ug/L	P366930	
		Fluridone**	0.016		ug/L	P366930	
		Imazapyr**	0.0094	I	ug/L	P366930	
		Hydrocodone**	0.0020	U	ug/L	P366930	
		Ibuprofen**	0.020	U	ug/L	P366930	
		Imidacloprid	0.67		ug/L	P366930	MS
		Linuron	0.0040	U	ug/L	P366930	
		MCPP	0.0020	U	ug/L	P366930	MS

Field ID: G3SD0067 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2101354	EPA 8321B	Naproxen**	0.0080	U	ug/L	P366930	
		Primidone**	0.0040	U	ug/L	P366930	
		Pyraclostrobin**	0.0020	U	ug/L	P366930	
		Triclopyr**	0.0040	U	ug/L	P366930	
2101359	EPA 8270E	Aldrin	4.2	U	ng/L	P366942	
		Alpha-BHC	2.1	UJ	ng/L	P366942	LCS
		Alpha-Chlordane	1.1	U	ng/L	P366942	
		Beta-BHC	11	U	ng/L	P366942	MS
		Bifenthrin**	4.2	U	ng/L	P366942	
		Delta-BHC	8.5	U	ng/L	P366942	
		Gamma-BHC	8.5	U	ng/L	P366942	
		Carbophenothion	11	U	ng/L	P366942	
		Chlorothalonil	2.1	U	ng/L	P366942	
		Cis-Nonachlor**	1.1	U	ng/L	P366942	
		Cypermethrin	21	U	ng/L	P366942	
		DDD-p,p'	6.4	U	ng/L	P366942	
		DDE-p,p'	6.4	U	ng/L	P366942	
		DDT-p,p'	7.4	U	ng/L	P366942	
		Dicofol	32	U	ng/L	P366942	
		Dieldrin	4.2	U	ng/L	P366942	
		Endosulfan I	4.2	U	ng/L	P366942	
		Endosulfan II	4.2	U	ng/L	P366942	
		Endosulfan Sulfate	2.1	U	ng/L	P366942	
		Endrin	2.1	U	ng/L	P366942	
		Endrin Aldehyde	2.1	U	ng/L	P366942	
		Endrin Ketone	2.1	U	ng/L	P366942	
		Ethalfluralin**	3.2	U	ng/L	P366942	
		Gamma-Chlordane	1.1	U	ng/L	P366942	
		Heptachlor	1.6	U	ng/L	P366942	
		Heptachlor Epoxide	2.1	U	ng/L	P366942	
		Hexachlorobenzene**	2.1	U	ng/L	P366942	
		Methoxychlor	4.2	U	ng/L	P366942	
		Mirex	2.1	U	ng/L	P366942	
		Permethrin	11	U	ng/L	P366942	
		Trans-Nonachlor**	1.1	U	ng/L	P366942	
		Trifluralin	2.6	U	ng/L	P366942	
	EPA 8276	Chlordane	5.3	U	ng/L	P366942	
		Toxaphene	32	U	ng/L	P366942	
2101362	EPA 8270E	Acetochlor	0.26	U	ng/L	P367025	
		Alachlor	0.26	U	ng/L	P367025	
		Ametryn	0.61	U	ng/L	P367025	
		Atrazine	20		ng/L	P367025	
		Atrazine Desethyl	1.5	U	ng/L	P367025	
		Azinphos Methyl	5.1	U	ng/L	P367025	
		Bromacil	550		ng/L	P367025	

Field ID: G3SD0067 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2101362	EPA 8270E	Butylate	0.41	U	ng/L	P367025	
		Chlorpyrifos Ethyl	0.43	I	ng/L	P367025	
		Chlorpyrifos Methyl	0.10	U	ng/L	P367025	
		Cyanazine	3.3	U	ng/L	P367025	
		Demeton	7.2	UJ	ng/L	P367025	RPD
		Diazinon	0.13	U	ng/L	P367025	
		Dimethenamid**	0.10	U	ng/L	P367025	
		Disulfoton	0.51	UJ	ng/L	P367025	RPD
		Dithiopyr**	0.10	U	ng/L	P367025	
		EPTC	1.3	U	ng/L	P367025	
		Ethion	0.15	U	ng/L	P367025	
		Ethoprop	0.10	U	ng/L	P367025	
		Fenamiphos	0.51	U	ng/L	P367025	
		Fipronil	0.26	U	ng/L	P367025	
		Fipronil Desulfinyl**	0.13	U	ng/L	P367025	
		Fipronil Sulfide	0.15	U	ng/L	P367025	
		Fipronil Sulfone	0.15	U	ng/L	P367025	
		Fonofos	0.20	U	ng/L	P367025	
		Hexazinone	140		ng/L	P367025	
		Malathion	0.36	U	ng/L	P367025	
		Metalaxyl	180		ng/L	P367025	
		Metolachlor	30		ng/L	P367025	
		Metribuzin	0.77	U	ng/L	P367025	
		Mevinphos	0.51	U	ng/L	P367025	
		Molinate	0.31	U	ng/L	P367025	
		Norflurazon	470		ng/L	P367025	
		Oxadiazon**	0.24	I	ng/L	P367025	
		Parathion Ethyl	0.26	U	ng/L	P367025	
		Parathion Methyl	0.56	U	ng/L	P367025	
		Pendimethalin	1.0	U	ng/L	P367025	
		Phorate	0.26	U	ng/L	P367025	
		Prodiamine**	0.18	U	ng/L	P367025	
		Prometon	0.92	U	ng/L	P367025	
		Prometryn	0.20	U	ng/L	P367025	
		Simazine	560		ng/L	P367025	
		Tebuconazole**	0.55	I	ng/L	P367025	RPD
		Terbufos	0.10	U	ng/L	P367025	
		Terbuthylazine	0.44	U	ng/L	P367025	
2101366	EPA 200.7 Rev. 4.4	Barium	36.9		ug/L	P367077	
		Calcium	58.4		mg/L	P367077	
		Iron	900		ug/L	P367077	
		Magnesium	18.9		mg/L	P367077	
		Potassium	12.4		mg/L	P367077	
		Sodium	41.8		mg/L	P367077	
		Zinc	5.0	U	ug/L	P367077	

Field ID: G3SD0067 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2101366	EPA 200.8 Rev. 5.4	Aluminum	222		ug/L	P367077	
		Antimony	0.17	I	ug/L	P367077	
		Arsenic	1.88		ug/L	P367077	
		Boron**	73.3		ug/L	P367077	
		Cadmium	0.020	U	ug/L	P367077	
		Chromium	0.93	I	ug/L	P367077	
		Copper	1.54		ug/L	P367077	
		Lead	0.25	I	ug/L	P367077	
		Nickel	1.1	I	ug/L	P367077	
		Selenium	0.35	I	ug/L	P367077	
		Silver	0.010	U	ug/L	P367077	
		Thallium	0.10	U	ug/L	P367077	

Ref. Method and Comment:
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8321B: MS accuracy for imazapyr could not be assessed due to high concentration of parameter in the spiked sample.
EPA 8321B: Refer to the narrative for an explanation of QC Codes. Surrogate spike recovery exceeding the control limits. Results confirmed in sample duplicate.
EPA 8270E: Refer to the narrative for an explanation of QC Codes.
EPA 8270E: MS accuracy for hexazinone not assessed due to high content of this parameter in the sample spiked. Refer to the narrative for an explanation of QC Codes. Analytical results were confirmed by re-extraction and re-analysis.

Sample Location: RunofftoPeaceRiverSite3 **Collection Date/Time: 07/09/2019 11:05**

Field ID: G3SD0132 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2101327	EPA 180.1 Rev. 2.0	Turbidity	13	A	NTU	P366980	
	EPA 300.0 Rev. 2.1	Chloride	41		mg Cl/L	P367221	
		Sulfate	23		mg SO4/L	P367223	
	SM 2120 B	Color (true)	170		PCU	P366994	
	SM 2320 B-97	Total Alkalinity	42		mg CaCO3/L	P367446	
	SM 2540 C-97	TDS	198	A	mg/L	P367493	
	SM 2540 D-97	TSS	2	IA	mg/L	P367508	
	SM 4500 F-C-97	Fluoride	0.41		mg F/L	P367450	
2101328	EPA 350.1 Rev. 2.0	Ammonia-N	0.016		mg N/L	P367713	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.79		mg N/L	P367153	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.013		mg N/L	P367046	
	EPA 365.1 Rev. 2.0	Total-P	0.46		mg P/L	P367156	
	SM 5310 B-00	Organic Carbon	21		mg C/L	P367344	
2101329	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.34		mg P/L	P366987	
2101356	EPA 8321B	2,4-D	0.0020	U	ug/L	P366930	
		Acesulfame K**	0.10	U	ug/L	P367009	
		AMPA**	0.10	U	ug/L	P367009	
		Sucralose**	0.010	U	ug/L	P367009	
		Acetaminophen**	0.0080	U	ug/L	P366930	
		Endothall**	0.25	U	ug/L	P367009	
		Glufosinate**	0.10	U	ug/L	P367009	
		Glyphosate**	0.10	U	ug/L	P367009	
		Bentazon	8.0E-04	U	ug/L	P366930	
		Carbamazepine**	8.0E-04	U	ug/L	P366930	
		Diuron	0.0020	U	ug/L	P366930	
		Fenuron	0.016	U	ug/L	P366930	
		Fluridone**	8.0E-04	U	ug/L	P366930	
		Imazapyr**	0.0040	U	ug/L	P366930	
		Hydrocodone**	0.0020	U	ug/L	P366930	
		Ibuprofen**	0.020	U	ug/L	P366930	
		Imidacloprid	0.0020	U	ug/L	P366930	MS
		Linuron	0.0040	U	ug/L	P366930	
		MCPP	0.0020	U	ug/L	P366930	MS
		Naproxen**	0.0080	U	ug/L	P366930	
		Primidone**	0.0040	U	ug/L	P366930	
		Pyraclostrobin**	0.0020	U	ug/L	P366930	
		Triclopyr**	0.0040	U	ug/L	P366930	

Ref. Method and Comment:
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 365.1 Rev. 2.0: Total-P: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.
EPA 8321B: MS accuracy for imazapyr could not be assessed due to high concentration of parameter in the spiked sample.

Sample Location: PrairieCreek@WshgtnLoop **Collection Date/Time: 07/09/2019 11:45**

Field ID: G3SD0067_DUP Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2101320	EPA 180.1 Rev. 2.0	Turbidity	6.0		NTU	P366980	
	EPA 300.0 Rev. 2.1	Chloride	85		mg Cl/L	P367221	
		Sulfate	80		mg SO4/L	P367223	
	SM 2120 B	Color (true)	170		PCU	P366994	
	SM 2320 B-97	Total Alkalinity	100		mg CaCO3/L	P367446	
	SM 2540 C-97	TDS	399		mg/L	P367493	
	SM 2540 D-97	TSS	4	I	mg/L	P367508	
	SM 4500 F-C-97	Fluoride	0.31		mg F/L	P367450	
2101323	EPA 350.1 Rev. 2.0	Ammonia-N	0.083		mg N/L	P367713	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.5		mg N/L	P367152	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.35		mg N/L	P367046	
	EPA 365.1 Rev. 2.0	Total-P	0.25		mg P/L	P367155	
	SM 5310 B-00	Organic Carbon	22		mg C/L	P367344	
2101326	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.17		mg P/L	P366987	
2101352	EPA 8321B	Aldicarb	0.020	U	ug/L	P366931	
		Aldicarb Sulfone	0.0020	U	ug/L	P366931	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P366931	
		Carbaryl	0.12		ug/L	P366931	
		Carbofuran	0.0020	U	ug/L	P366931	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P366931	
		Methiocarb	0.0020	U	ug/L	P366931	
		Methomyl	0.0020	U	ug/L	P366931	
		Oxamyl	0.0020	U	ug/L	P366931	RPD
		Propoxur	0.0020	U	ug/L	P366931	
2101355		2,4-D	1.3		ug/L	P366930	
		Acesulfame K**	0.10	U	ug/L	P367009	
		AMPA**	2.2		ug/L	P367009	
		Sucralose**	0.010	U	ug/L	P367009	
		Acetaminophen**	0.0080	U	ug/L	P366930	
		Endothall**	0.25	U	ug/L	P367009	
		Glufosinate**	0.10	U	ug/L	P367009	
		Glyphosate**	2.7		ug/L	P367009	
		Bentazon	0.045	I	ug/L	P366930	
		Carbamazepine**	8.0E-04	U	ug/L	P366930	
		Diuron	0.31		ug/L	P366930	
		Fenuron	0.016	U	ug/L	P366930	
		Fluridone**	0.018		ug/L	P366930	
		Imazapyr**	0.0092	I	ug/L	P366930	
		Hydrocodone**	0.0020	U	ug/L	P366930	
		Ibuprofen**	0.020	U	ug/L	P366930	
		Imidacloprid	0.69		ug/L	P366930	MS
		Linuron	0.0040	U	ug/L	P366930	
		MCPP	0.0020	U	ug/L	P366930	MS

Field ID: G3SD0067_DUP Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2101355	EPA 8321B	Naproxen**	0.0080	U	ug/L	P366930	
		Primidone**	0.0040	U	ug/L	P366930	
		Pyraclostrobin**	0.0020	U	ug/L	P366930	
		Triclopyr**	0.0040	U	ug/L	P366930	
2101360	EPA 8270E	Aldrin	4.2	U	ng/L	P366942	
		Alpha-BHC	2.1	UJ	ng/L	P366942	LCS
		Alpha-Chlordane	1.0	U	ng/L	P366942	
		Beta-BHC	10	U	ng/L	P366942	MS
		Bifenthrin**	4.2	U	ng/L	P366942	
		Delta-BHC	8.4	U	ng/L	P366942	
		Gamma-BHC	8.4	U	ng/L	P366942	
		Carbophenothion	10	U	ng/L	P366942	
		Chlorothalonil	2.1	U	ng/L	P366942	
		Cis-Nonachlor**	1.0	U	ng/L	P366942	
		Cypermethrin	21	U	ng/L	P366942	
		DDD-p,p'	6.3	U	ng/L	P366942	
		DDE-p,p'	6.3	U	ng/L	P366942	
		DDT-p,p'	7.3	U	ng/L	P366942	
		Dicofol	31	U	ng/L	P366942	
		Dieldrin	4.2	U	ng/L	P366942	
		Endosulfan I	4.2	U	ng/L	P366942	
		Endosulfan II	4.2	U	ng/L	P366942	
		Endosulfan Sulfate	2.1	U	ng/L	P366942	
		Endrin	2.1	U	ng/L	P366942	
		Endrin Aldehyde	2.1	U	ng/L	P366942	
		Endrin Ketone	2.1	U	ng/L	P366942	
		Ethalfluralin**	3.1	U	ng/L	P366942	
		Gamma-Chlordane	1.0	U	ng/L	P366942	
		Heptachlor	1.6	U	ng/L	P366942	
		Heptachlor Epoxide	2.1	U	ng/L	P366942	
		Hexachlorobenzene**	2.1	U	ng/L	P366942	
		Methoxychlor	4.2	U	ng/L	P366942	
		Mirex	2.1	U	ng/L	P366942	
		Permethrin	10	U	ng/L	P366942	
		Trans-Nonachlor**	1.0	U	ng/L	P366942	
		Trifluralin	2.6	U	ng/L	P366942	
	EPA 8276	Chlordane	5.2	U	ng/L	P366942	
		Toxaphene	31	U	ng/L	P366942	
2101363	EPA 8270E	Acetochlor	0.26	U	ng/L	P367025	
		Alachlor	0.26	U	ng/L	P367025	
		Ametryn	0.61	U	ng/L	P367025	
		Atrazine	23		ng/L	P367025	
		Atrazine Desethyl	1.5	U	ng/L	P367025	
		Azinphos Methyl	5.1	U	ng/L	P367025	
		Bromacil	480		ng/L	P367025	

Field ID: G3SD0067_DUP Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2101363	EPA 8270E	Butylate	0.41	U	ng/L	P367025	
		Chlorpyrifos Ethyl	0.29	I	ng/L	P367025	
		Chlorpyrifos Methyl	0.10	U	ng/L	P367025	
		Cyanazine	3.3	U	ng/L	P367025	
		Demeton	7.2	UJ	ng/L	P367025	RPD
		Diazinon	0.13	U	ng/L	P367025	
		Dimethenamid**	0.10	U	ng/L	P367025	
		Disulfoton	0.51	UJ	ng/L	P367025	RPD
		Dithiopyr**	0.10	U	ng/L	P367025	
		EPTC	1.3	U	ng/L	P367025	
		Ethion	0.15	U	ng/L	P367025	
		Ethoprop	0.10	U	ng/L	P367025	
		Fenamiphos	0.51	U	ng/L	P367025	
		Fipronil	0.26	U	ng/L	P367025	
		Fipronil Desulfinyl**	0.13	U	ng/L	P367025	
		Fipronil Sulfide	0.15	U	ng/L	P367025	
		Fipronil Sulfone	0.15	U	ng/L	P367025	
		Fonofos	0.20	U	ng/L	P367025	
		Hexazinone	140		ng/L	P367025	
		Malathion	0.36	U	ng/L	P367025	
		Metalaxyl	180		ng/L	P367025	
		Metolachlor	46		ng/L	P367025	
		Metribuzin	0.77	U	ng/L	P367025	
		Mevinphos	0.51	U	ng/L	P367025	
		Molinate	0.31	U	ng/L	P367025	
		Norflurazon	400		ng/L	P367025	
		Oxadiazon**	0.25	I	ng/L	P367025	
		Parathion Ethyl	0.26	U	ng/L	P367025	
		Parathion Methyl	0.56	U	ng/L	P367025	
		Pendimethalin	1.0	U	ng/L	P367025	
		Phorate	0.26	U	ng/L	P367025	
		Prodiamine**	0.18	U	ng/L	P367025	
		Prometon	0.92	U	ng/L	P367025	
		Prometryn	0.20	U	ng/L	P367025	
		Simazine	440		ng/L	P367025	
		Tebuconazole**	0.62	I	ng/L	P367025	RPD
		Terbufos	0.10	U	ng/L	P367025	
		Terbuthylazine	0.44	U	ng/L	P367025	
2101367	EPA 200.7 Rev. 4.4	Barium	36.7		ug/L	P367077	
		Calcium	58.6		mg/L	P367077	
		Iron	930		ug/L	P367077	
		Magnesium	19.0		mg/L	P367077	
		Potassium	12.5		mg/L	P367077	
		Sodium	42.8		mg/L	P367077	
		Zinc	5.0	U	ug/L	P367077	

Field ID: G3SD0067_DUP Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2101367	EPA 200.8 Rev. 5.4	Aluminum	238		ug/L	P367077	
		Antimony	0.17	I	ug/L	P367077	
		Arsenic	1.95		ug/L	P367077	
		Boron**	72.2		ug/L	P367077	
		Cadmium	0.020	U	ug/L	P367077	
		Chromium	0.97	I	ug/L	P367077	
		Copper	1.56		ug/L	P367077	
		Lead	0.24	I	ug/L	P367077	
		Nickel	1.1	I	ug/L	P367077	
		Selenium	0.33	I	ug/L	P367077	
		Silver	0.010	U	ug/L	P367077	
		Thallium	0.10	U	ug/L	P367077	

Ref. Method and Comment:
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8321B: MS accuracy for imazapyr could not be assessed due to high concentration of parameter in the spiked sample.
EPA 8270E: Refer to the narrative for an explanation of QC Codes.
EPA 8270E: MS accuracy for hexazinone not assessed due to high content of this parameter in the sample spiked. Refer to the narrative for an explanation of QC Codes. Analytical results were confirmed by re-extraction and re-analysis.

Sample Location: BobcatCreekPreserveEast **Collection Date/Time: 07/09/2019 12:35**

Field ID: G3SD0131 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2101330	EPA 180.1 Rev. 2.0	Turbidity	6.2		NTU	P366980	
	EPA 300.0 Rev. 2.1	Chloride	39		mg Cl/L	P367221	
		Sulfate	10		mg SO4/L	P367223	
	SM 2120 B	Color (true)	72		PCU	P366994	
	SM 2320 B-97	Total Alkalinity	101		mg CaCO3/L	P367446	
	SM 2540 C-97	TDS	196		mg/L	P367493	
	SM 2540 D-97	TSS	4	I	mg/L	P367508	
	SM 4500 F-C-97	Fluoride	0.48		mg F/L	P367450	
2101331	EPA 350.1 Rev. 2.0	Ammonia-N	0.040		mg N/L	P367713	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.72		mg N/L	P367153	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.049		mg N/L	P367047	
	EPA 365.1 Rev. 2.0	Total-P	1.1		mg P/L	P367156	
	SM 5310 B-00	Organic Carbon	15		mg C/L	P367344	
2101332	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.82		mg P/L	P366987	

Ref. Method and Comment:
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 365.1 Rev. 2.0: Total-P: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Quality Assurance Report
Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P366980

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P367077

Component	Result	Code	Units
Barium	1.0	U	ug/L
Calcium	0.075	U	mg/L
Iron	30	U	ug/L
Magnesium	0.040	U	mg/L
Potassium	0.30	U	mg/L
Sodium	0.50	U	mg/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P367077

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Boron	2.0	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.40	U	ug/L
Copper	0.40	U	ug/L
Lead	0.20	U	ug/L
Nickel	0.50	U	ug/L
Selenium	0.20	U	ug/L
Silver	0.010	U	ug/L
Thallium	0.10	U	ug/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P367221

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P367223

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P367713

Component	Result	Code	Units
Ammonia-N	0.002	U	mg N/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P367152

Component	Result	Code	Units
Kjeldahl Nitrogen	0.080	U	mg N/L

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P367153

Component	Result	Code	Units
Kjeldahl Nitrogen	0.080	U	mg N/L

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P367046

Component	Result	Code	Units
NO2NO3-N	0.004	U	mg N/L

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P367047

Component	Result	Code	Units
NO2NO3-N	0.004	U	mg N/L

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P367155

Component	Result	Code	Units
Total-P	0.002	U	mg P/L

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P367156

Component	Result	Code	Units
Total-P	0.002	U	mg P/L

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P366987

Component	Result	Code	Units
O-Phosphate-P	0.004	U	mg P/L

Reference Method: EPA 8270E
Batch ID: P366942

Component	Result	Code	Units
Aldrin	4.0	U	ng/L
Alpha-BHC	2.0	U	ng/L
Alpha-Chlordane	1.0	U	ng/L
Beta-BHC	10	U	ng/L
Bifenthrin	4.0	U	ng/L
Carbophenothion	10	U	ng/L
Chlorothalonil	2.0	U	ng/L
Cis-Nonachlor	1.0	U	ng/L
Cypermethrin	20	U	ng/L
DDD-p,p'	6.0	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P366942

Component	Result	Code	Units
DDE-p,p'	6.0	U	ng/L
DDT-p,p'	7.0	U	ng/L
Delta-BHC	8.0	U	ng/L
Dicofol	30	U	ng/L
Dieldrin	4.0	U	ng/L
Endosulfan I	4.0	U	ng/L
Endosulfan II	4.0	U	ng/L
Endosulfan Sulfate	2.0	U	ng/L
Endrin	2.0	U	ng/L
Endrin Aldehyde	2.0	U	ng/L
Endrin Ketone	2.0	U	ng/L
Ethalfluralin	3.0	U	ng/L
Gamma-BHC	8.0	U	ng/L
Gamma-Chlordane	1.0	U	ng/L
Heptachlor	1.5	U	ng/L
Heptachlor Epoxide	2.0	U	ng/L
Hexachlorobenzene	2.0	U	ng/L
Methoxychlor	4.0	U	ng/L
Mirex	2.0	U	ng/L
Permethrin	10	U	ng/L
Trans-Nonachlor	1.0	U	ng/L
Trifluralin	2.5	U	ng/L

Reference Method: EPA 8270E
Batch ID: P367025

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.60	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	2.3	I	ng/L
Azinphos Methyl	5.0	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Cyanazine	3.2	U	ng/L
Demeton	7.0	U	ng/L
Diazinon	0.12	U	ng/L
Dimethenamid	0.10	U	ng/L
Disulfoton	0.50	U	ng/L
Dithiopyr	0.10	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Fenamiphos	0.50	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fonofos	0.20	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P367025

Component	Result	Code	Units
Hexazinone	0.50	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.30	U	ng/L
Metolachlor	0.50	U	ng/L
Metribuzin	0.75	U	ng/L
Mevinphos	0.50	U	ng/L
Molinate	0.30	U	ng/L
Norflurazon	0.50	U	ng/L
Oxadiazon	0.10	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Pendimethalin	1.0	U	ng/L
Phorate	0.25	U	ng/L
Prodiamine	0.18	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Simazine	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbuthylazine	0.42	U	ng/L

Reference Method: EPA 8276
Batch ID: P366942

Component	Result	Code	Units
Chlordane	5.0	U	ng/L
Toxaphene	30	U	ng/L

Reference Method: EPA 8321B
Batch ID: P366930

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Bentazon	8.0E-04	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
MCPP	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P366931

Component	Result	Code	Units
3-Hydroxycarbofuran	0.0020	U	ug/L
Aldicarb	0.020	U	ug/L
Aldicarb Sulfone	0.0020	U	ug/L
Aldicarb Sulfoxide	0.0020	U	ug/L
Carbaryl	0.0020	U	ug/L
Carbofuran	0.0020	U	ug/L
Methiocarb	0.0020	U	ug/L
Methomyl	0.0020	U	ug/L
Oxamyl	0.0020	U	ug/L
Propoxur	0.0020	U	ug/L

Reference Method: EPA 8321B
Batch ID: P367009

Component	Result	Code	Units
Acesulfame K	0.10	U	ug/L
AMPA	0.10	U	ug/L
Endothall	0.25	U	ug/L
Glufosinate	0.10	U	ug/L
Glyphosate	0.10	U	ug/L
Sucralose	0.010	U	ug/L

Reference Method: SM 2120 B
Batch ID: P366994

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P367446

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO3/L

Reference Method: SM 2540 C-97
Batch ID: P367493

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P367508

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P367450

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Quality Assurance Report
Method Blank Results

Reference Method: SM 5310 B-00
Batch ID: P367344

Component	Result	Code	Units
Organic Carbon	0.50	U	mg C/L

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P367077

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Barium	102		P	85 - 115
Calcium	109		P	85 - 115
Iron	105		P	85 - 115
Magnesium	111		P	85 - 115
Potassium	110		P	85 - 115
Sodium	107		P	85 - 115
Zinc	101		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P367077

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	102		P	85 - 115
Antimony	101		P	85 - 115
Arsenic	106		P	85 - 115
Boron	104		P	85 - 115
Cadmium	102		P	85 - 115
Chromium	101		P	85 - 115
Copper	104		P	85 - 115
Lead	104		P	85 - 115
Nickel	105		P	85 - 115
Selenium	104		P	85 - 115
Silver	104		P	85 - 115
Thallium	104		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P367221

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	101		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P367223

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	101		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P367713

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	97.0		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P367152

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	102		P	90 - 110

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P367153

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	99.7		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P367046

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	103		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P367047

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	103		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P367155

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	102		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P367156

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	107		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P366987

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	97.8		P	90 - 110

Reference Method: EPA 8270E
Batch ID: P366942

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	63.9	65.9	P/P	20 - 93.0
Alpha-BHC	122	124	F/F	57 - 119
Alpha-Chlordane	90.2	86.9	P/P	58 - 112
Beta-BHC	143	141	P/P	56 - 149
Bifenthrin	79.4	72.8	P/P	30 - 134
Carbophenothion	90.3	98.6	P/P	26 - 147
Chlorothalonil	147	132	P/P	20 - 155
Cis-Nonachlor	88.5	84.9	P/P	54 - 115
Cypermethrin	83.8	81.4	P/P	40 - 137
DDD-p,p'	99.3	95.2	P/P	65 - 129
DDE-p,p'	89.5	87.5	P/P	57 - 116
DDT-p,p'	120	116	P/P	53 - 133
Delta-BHC	152	142	P/P	59 - 163
Dicofol	98.6	92.9	P/P	24 - 138
Dieldrin	99.1	95.5	P/P	60 - 120
Endosulfan I	95.6	95.1	P/P	64 - 118

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P366942

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Endosulfan II	102	102	P/P	58 - 142
Endosulfan Sulfate	94.3	90.3	P/P	60 - 127
Endrin	95.7	91.5	P/P	59 - 122
Endrin Aldehyde	104	97.9	P/P	49 - 132
Endrin Ketone	90.5	88.9	P/P	64 - 121
Ethalfluralin	107	99.2	P/P	60 - 126
Gamma-BHC	129	135	P/P	56 - 141
Gamma-Chlordane	86.1	83.8	P/P	56 - 110
Heptachlor	77.7	75.7	P/P	46 - 96.0
Heptachlor Epoxide	93.9	92.4	P/P	61 - 112
Hexachlorobenzene	83.0	78.6	P/P	44 - 98.0
Methoxychlor	132	129	P/P	63 - 134
Mirex	65.4	64.4	P/P	45 - 100
Permethrin	67.1	63.4	P/P	53 - 115
Trans-Nonachlor	85.8	82.0	P/P	47 - 110
Trifluralin	103	99.8	P/P	39 - 142

Reference Method: EPA 8270E
Batch ID: P367025

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	87.0	105	P/P	69 - 122
Alachlor	84.6	99.3	P/P	71 - 120
Ametryn	84.8	95.8	P/P	47 - 138
Atrazine	89.1	109	P/P	74 - 124
Atrazine Desethyl	128	136	P/P	38 - 138
Azinphos Methyl	98.6	118	P/P	69 - 154
Bromacil	73.6	84.8	P/P	39 - 121
Butylate	53.1	56.3	P/P	27 - 87.0
Chlorpyrifos Ethyl	85.0	102	P/P	69 - 118
Chlorpyrifos Methyl	91.5	108	P/P	70 - 120
Cyanazine	169	190	P/P	20 - 250
Demeton	49.5	80.0	P/P	39 - 118
Diazinon	101	121	P/P	68 - 127
Dimethenamid	73.2	87.0	P/P	66 - 125
Disulfoton	55.6	93.4	P/P	52 - 126
Dithiopyr	89.6	106	P/P	67 - 127
EPTC	53.1	52.7	P/P	24 - 88.0
Ethion	52.5	56.9	P/P	51 - 132
Ethoprop	89.7	108	P/P	58 - 117
Fenamiphos	75.3	89.7	P/P	38 - 139
Fipronil	88.2	105	P/P	61 - 124
Fipronil Desulfinyl	80.0	92.4	P/P	47 - 120
Fipronil Sulfide	80.3	92.3	P/P	56 - 119
Fipronil Sulfone	69.1	74.4	P/P	50 - 117
Fonofos	95.6	113	P/P	60 - 121
Hexazinone	93.9	103	P/P	55 - 137
Malathion	83.6	96.2	P/P	66 - 126
Metalaxyl	90.2	100	P/P	33 - 140
Metolachlor	79.2	92.8	P/P	69 - 119
Metribuzin	171	218	P/P	31 - 238
Mevinphos	84.4	96.5	P/P	42 - 113

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P367025

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Molinate	66.2	75.8	P/P	32 - 96.0
Norflurazon	83.1	99.2	P/P	54 - 123
Oxadiazon	78.6	96.4	P/P	63 - 128
Parathion Ethyl	87.7	98.1	P/P	72 - 111
Parathion Methyl	95.3	107	P/P	74 - 126
Pendimethalin	86.0	96.1	P/P	61 - 131
Phorate	69.7	85.7	P/P	51 - 115
Prodiamine	39.3	43.3	P/P	38 - 144
Prometon	74.2	88.2	P/P	54 - 119
Prometryn	83.9	93.9	P/P	63 - 120
Simazine	104	120	P/P	75 - 126
Tebuconazole	50.7	59.3	P/P	20 - 119
Terbufos	84.0	106	P/P	64 - 116
Terbuthylazine	87.6	101	P/P	73 - 117

Reference Method: EPA 8276
Batch ID: P366942

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	85.4	85.9	P/P	43 - 128
Toxaphene	72.0	71.2	P/P	38 - 140

Reference Method: EPA 8321B
Batch ID: P366930

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	135		P	40 - 150
Acetaminophen	93.3		P	30 - 150
Bentazon	96.7		P	30 - 150
Carbamazepine	90.2		P	40 - 150
Diuron	88.7		P	40 - 150
Fenuron	98.6		P	40 - 150
Fluridone	94.9		P	40 - 150
Hydrocodone	94.7		P	40 - 150
Ibuprofen	98.5		P	30 - 150
Imazapyr	74.0		P	40 - 150
Imidacloprid	91.4		P	40 - 150
Linuron	75.0		P	40 - 150
MCPP	146		P	40 - 150
Naproxen	90.0		P	40 - 150
Primidone	89.4		P	40 - 150
Pyraclostrobin	95.3		P	30 - 150
Triclopyr	139		P	30 - 150

Reference Method: EPA 8321B
Batch ID: P366931

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	101		P	40 - 150
Aldicarb	112		P	30 - 150
Aldicarb Sulfone	105		P	40 - 150
Aldicarb Sulfoxide	72.0		P	40 - 150

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P366931

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Carbaryl	85.9		P	40 - 150
Carbofuran	105		P	40 - 150
Methiocarb	80.0		P	40 - 150
Methomyl	85.9		P	40 - 150
Oxamyl	99.9		P	40 - 150
Propoxur	95.3		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P367009

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	112		P	40 - 150
AMPA	90.0		P	40 - 150
Endothall	115		P	40 - 150
Glufosinate	108		P	40 - 150
Glyphosate	95.9		P	40 - 140
Sucralose	46.7		P	40 - 150

Reference Method: SM 2120 B
Batch ID: P366994

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	102		P	85 - 115

Reference Method: SM 2320 B-97
Batch ID: P367446

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	104		P	98 - 106

Reference Method: SM 4500 F-C-97
Batch ID: P367450

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.0		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P367344

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	99.2		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P367077

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2101041	Barium	99.3	100	P/P	80 - 120
2101041	Calcium	107	104	P/P	80 - 120
2101041	Iron	104	102	P/P	80 - 120
2101041	Magnesium	108	107	P/P	80 - 120
2101041	Potassium	114	113	P/P	80 - 120
2101041	Sodium	100	103	P/P	80 - 120
2101041	Zinc	99.9	101	P/P	80 - 120
2101279	Barium	101		P	80 - 120
2101279	Calcium	102		P	80 - 120
2101279	Iron	103		P	80 - 120
2101279	Magnesium	106		P	80 - 120
2101279	Potassium	108		P	80 - 120
2101279	Sodium	109		P	80 - 120
2101279	Zinc	100		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P367077

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2101041	Aluminum	102	102	P/P	80 - 120
2101041	Antimony	102	102	P/P	80 - 120
2101041	Arsenic	104	104	P/P	80 - 120
2101041	Boron	105	105	P/P	80 - 120
2101041	Cadmium	105	105	P/P	80 - 120
2101041	Chromium	104	104	P/P	80 - 120
2101041	Copper	104	106	P/P	80 - 120
2101041	Lead	106	105	P/P	80 - 120
2101041	Nickel	104	104	P/P	80 - 120
2101041	Selenium	102	101	P/P	80 - 120
2101041	Silver	105	105	P/P	80 - 120
2101041	Thallium	105	107	P/P	80 - 120
2101279	Aluminum	102		P	80 - 120
2101279	Antimony	102		P	80 - 120
2101279	Arsenic	105		P	80 - 120
2101279	Boron	107		P	80 - 120
2101279	Cadmium	104		P	80 - 120
2101279	Chromium	103		P	80 - 120
2101279	Copper	102		P	80 - 120
2101279	Lead	105		P	80 - 120
2101279	Nickel	102		P	80 - 120
2101279	Selenium	103		P	80 - 120
2101279	Silver	106		P	80 - 120
2101279	Thallium	105		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P367221

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2101244	Chloride	101	102	P/P	90 - 110
2101338	Chloride	101		P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P367223

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2101244	Sulfate	101	103	P/P	90 - 110
2101338	Sulfate	101		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P367713

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2101321	Ammonia-N	94.3	98.4	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P367152

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2101321	Kjeldahl Nitrogen	97.6	98.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P367153

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2101331	Kjeldahl Nitrogen	107	106	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P367046

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2101328	NO2NO3-N	99.5	100	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P367047

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2101331	NO2NO3-N	99.6	95.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P367155

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2101321	Total-P	107	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P366987

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2101398	O-Phosphate-P	95.2	96.3	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P366942

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2101442	Aldrin	61.6	60.4	P/P	25 - 92.0
2101442	Alpha-BHC	128	124	P/P	49 - 130
2101442	Alpha-Chlordane	92.4	84.0	P/P	50 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P366942

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2101442	Beta-BHC	166	154	F/P	43 - 157
2101442	Bifenthrin	81.9	76.6	P/P	46 - 116
2101442	Carbophenothion	131	113	P/P	27 - 180
2101442	Chlorothalonil	175	159	P/P	10 - 216
2101442	Cis-Nonachlor	92.2	81.2	P/P	55 - 112
2101442	Cypermethrin	89.0	79.3	P/P	40 - 153
2101442	DDD-p,p'	106	95.2	P/P	53 - 128
2101442	DDE-p,p'	94.0	85.7	P/P	48 - 116
2101442	DDT-p,p'	119	114	P/P	47 - 128
2101442	Delta-BHC	172	171	P/P	51 - 196
2101442	Dicofol	92.8	90.0	P/P	10 - 147
2101442	Dieldrin	102	93.8	P/P	48 - 128
2101442	Endosulfan I	100	94.9	P/P	58 - 126
2101442	Endosulfan II	111	103	P/P	50 - 150
2101442	Endosulfan Sulfate	94.3	87.5	P/P	56 - 130
2101442	Endrin	108	95.7	P/P	50 - 126
2101442	Endrin Aldehyde	101	93.1	P/P	12 - 145
2101442	Endrin Ketone	98.5	93.2	P/P	59 - 132
2101442	Ethalfluralin	109	103	P/P	65 - 122
2101442	Gamma-BHC	147	149	P/P	50 - 155
2101442	Gamma-Chlordane	88.8	80.5	P/P	50 - 112
2101442	Heptachlor	73.9	70.7	P/P	41 - 98.0
2101442	Heptachlor Epoxide	97.4	90.3	P/P	55 - 117
2101442	Hexachlorobenzene	80.7	74.1	P/P	47 - 91.0
2101442	Methoxychlor	131	129	P/P	55 - 133
2101442	Mirex	65.3	61.3	P/P	44 - 101
2101442	Permethrin	72.0	62.7	P/P	52 - 124
2101442	Trans-Nonachlor	89.3	81.1	P/P	53 - 99.0
2101442	Trifluralin	101	98.6	P/P	10 - 201

Reference Method: EPA 8270E
Batch ID: P367025

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2101178	Acetochlor	91.3	96.0	P/P	63 - 129
2101178	Alachlor	86.7	90.5	P/P	65 - 127
2101178	Ametryn	87.3	90.1	P/P	40 - 164
2101178	Atrazine	102	103	P/P	66 - 135
2101178	Atrazine Desethyl	109	110	P/P	14 - 157
2101178	Azinphos Methyl	97.1	103	P/P	49 - 180
2101178	Bromacil	73.8	81.0	P/P	48 - 130
2101178	Butylate	48.5	63.4	P/P	10 - 94.0
2101178	Chlorpyrifos Ethyl	93.3	96.6	P/P	58 - 123
2101178	Chlorpyrifos Methyl	92.9	99.3	P/P	58 - 125
2101178	Cyanazine	186	188	P/P	24 - 253
2101178	Demeton	79.2	77.9	P/P	25 - 149
2101178	Diazinon	111	107	P/P	59 - 144
2101178	Dimethenamid	72.5	82.7	P/P	46 - 139
2101178	Disulfoton	92.6	90.8	P/P	54 - 132
2101178	Dithiopyr	91.5	97.1	P/P	64 - 130
2101178	EPTC	55.8	65.2	P/P	10 - 92.0
2101178	Ethion	37.9	48.1	P/P	30 - 148

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P367025

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2101178	Ethoprop	99.2	100	P/P	50 - 130
2101178	Fenamiphos	77.2	93.9	P/P	49 - 142
2101178	Fipronil	89.9	97.3	P/P	46 - 140
2101178	Fipronil Desulfinyl	82.3	88.8	P/P	30 - 121
2101178	Fipronil Sulfide	76.5	88.4	P/P	31 - 136
2101178	Fipronil Sulfone	73.9	79.0	P/P	16 - 136
2101178	Fonofos	103	109	P/P	55 - 129
2101178	Malathion	81.7	87.7	P/P	56 - 135
2101178	Metalaxyl	90.9	95.5	P/P	54 - 135
2101178	Metolachlor	83.1	84.3	P/P	51 - 140
2101178	Metribuzin	217	222	P/P	45 - 254
2101178	Mevinphos	93.6	89.1	P/P	33 - 131
2101178	Molinate	74.8	79.4	P/P	14 - 98.0
2101178	Norflurazon	87.7	89.5	P/P	34 - 136
2101178	Oxadiazon	71.1	84.8	P/P	67 - 116
2101178	Parathion Ethyl	92.3	94.2	P/P	66 - 118
2101178	Parathion Methyl	92.1	96.5	P/P	64 - 136
2101178	Pendimethalin	93.6	94.9	P/P	59 - 144
2101178	Phorate	91.2	76.6	P/P	42 - 130
2101178	Prodiamine	44.3	49.8	P/P	42 - 148
2101178	Prometon	75.3	83.5	P/P	59 - 134
2101178	Prometryn	85.8	89.2	P/P	54 - 135
2101178	Simazine	99.4	105	P/P	53 - 156
2101178	Tebuconazole	36.7	51.2	P/P	10 - 131
2101178	Terbufos	104	99.5	P/P	57 - 131
2101178	Terbuthylazine	92.4	95.4	P/P	68 - 125

Reference Method: EPA 8276
Batch ID: P366942

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2101466	Chlordane	103	112	P/P	34 - 136
2101466	Toxaphene	77.2	82.0	P/P	22 - 152

Reference Method: EPA 8321B
Batch ID: P366930

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2100814	2,4-D	118	130	P/P	40 - 150
2100814	Acetaminophen	95.7	97.8	P/P	30 - 150
2100814	Bentazon	116	107	P/P	30 - 150
2100814	Carbamazepine	73.8	76.4	P/P	40 - 150
2100814	Diuron	64.1	68.6	P/P	40 - 150
2100814	Fenuron	76.5	80.4	P/P	40 - 150
2100814	Fluridone	75.1	79.7	P/P	40 - 150
2100814	Hydrocodone	75.3	95.3	P/P	40 - 150
2100814	Ibuprofen	83.9	80.7	P/P	30 - 150
2100814	Imidacloprid	146	169	P/F	40 - 150
2100814	Linuron	56.7	59.8	P/P	40 - 150
2100814	MCPP	153	160	F/F	40 - 150
2100814	Naproxen	89.2	86.0	P/P	40 - 150
2100814	Primidone	90.7	93.5	P/P	40 - 150

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P366930

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2100814	Pyraclostrobin	88.2	89.5	P/P	30 - 150
2100814	Triclopyr	133	131	P/P	30 - 150

Reference Method: EPA 8321B
Batch ID: P366931

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2102579	3-Hydroxycarbofuran	91.0	85.2	P/P	40 - 150
2102579	Aldicarb	67.3	76.5	P/P	30 - 150
2102579	Aldicarb Sulfone	101	91.6	P/P	40 - 150
2102579	Aldicarb Sulfoxide	47.6	43.0	P/P	40 - 150
2102579	Carbaryl	62.1	57.3	P/P	40 - 150
2102579	Carbofuran	78.1	72.2	P/P	40 - 150
2102579	Methiocarb	70.0	67.1	P/P	40 - 150
2102579	Methomyl	60.9	66.9	P/P	40 - 150
2102579	Oxamyl	97.7	71.2	P/P	40 - 150
2102579	Propoxur	70.7	66.3	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P367009

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2100814	Acesulfame K	103	114	P/P	40 - 150
2100814	AMPA	46.6	43.8	P/P	40 - 150
2100814	Endothall	83.0	87.7	P/P	40 - 150
2100814	Glufosinate	72.5	73.0	P/P	40 - 150
2100814	Glyphosate	104	92.5	P/P	40 - 140
2100814	Sucralose	76.6	86.9	P/P	40 - 150

Reference Method: SM 4500 F-C-97
Batch ID: P367450

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2101338	Fluoride	96.8	96.8	P/P	89 - 106

Reference Method: SM 5310 B-00
Batch ID: P367344

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2101390	Organic Carbon	101	101	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P366980

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2101327	Turbidity	0.749	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P367077

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2101041	Barium	0.701	Spike	P	0 - 20
2101041	Calcium	1.79	Spike	P	0 - 20
2101041	Iron	1.25	Spike	P	0 - 20
2101041	Magnesium	1.28	Spike	P	0 - 20
2101041	Potassium	0.977	Spike	P	0 - 20
2101041	Sodium	1.22	Spike	P	0 - 20
2101041	Zinc	0.642	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P367077

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2101041	Aluminum	0.390	Spike	P	0 - 20
2101041	Antimony	0.132	Spike	P	0 - 20
2101041	Arsenic	0.0823	Spike	P	0 - 20
2101041	Boron	0.466	Spike	P	0 - 20
2101041	Cadmium	0.723	Spike	P	0 - 20
2101041	Chromium	0.100	Spike	P	0 - 20
2101041	Copper	1.24	Spike	P	0 - 20
2101041	Lead	0.344	Spike	P	0 - 20
2101041	Nickel	0.151	Spike	P	0 - 20
2101041	Selenium	0.721	Spike	P	0 - 20
2101041	Silver	0.141	Spike	P	0 - 20
2101041	Thallium	1.62	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P367221

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2101244	Chloride	1.16	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P367223

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2101244	Sulfate	1.52	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P367713

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2101321	Ammonia-N	2.84	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P367152

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2101321	Kjeldahl Nitrogen	0.316	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P367153

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2101331	Kjeldahl Nitrogen	0.719	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P367046

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2101328	NO2NO3-N	0.471	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P367047

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2101331	NO2NO3-N	3.28	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P367155

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2101321	Total-P	4.06	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P367156

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2101331	Total-P	0.197	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P366987

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2101398	O-Phosphate-P	0.804	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P366942

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2101442	Aldrin	1.98	Spike	P	0 - 30
2101442	Alpha-BHC	3.07	Spike	P	0 - 30
2101442	Alpha-Chlordane	9.44	Spike	P	0 - 30
2101442	Beta-BHC	7.37	Spike	P	0 - 30
2101442	Bifenthrin	6.72	Spike	P	0 - 30
2101442	Carbophenothion	14.9	Spike	P	0 - 30
2101442	Chlorothalonil	9.95	Spike	P	0 - 30
2101442	Cis-Nonachlor	12.7	Spike	P	0 - 30
2101442	Cypermethrin	11.6	Spike	P	0 - 30
2101442	DDD-p,p'	10.4	Spike	P	0 - 30
2101442	DDE-p,p'	9.25	Spike	P	0 - 30
2101442	DDT-p,p'	5.05	Spike	P	0 - 30
2101442	Delta-BHC	0.214	Spike	P	0 - 30
2101442	Dicofol	3.10	Spike	P	0 - 30
2101442	Dieldrin	8.47	Spike	P	0 - 30
2101442	Endosulfan I	5.62	Spike	P	0 - 30
2101442	Endosulfan II	7.51	Spike	P	0 - 30
2101442	Endosulfan Sulfate	7.44	Spike	P	0 - 30
2101442	Endrin	12.1	Spike	P	0 - 30
2101442	Endrin Aldehyde	8.44	Spike	P	0 - 30
2101442	Endrin Ketone	5.49	Spike	P	0 - 30
2101442	Ethalfluralin	5.34	Spike	P	0 - 30
2101442	Gamma-BHC	1.19	Spike	P	0 - 30
2101442	Gamma-Chlordane	9.76	Spike	P	0 - 30
2101442	Heptachlor	4.41	Spike	P	0 - 30
2101442	Heptachlor Epoxide	7.49	Spike	P	0 - 30
2101442	Hexachlorobenzene	8.55	Spike	P	0 - 30
2101442	Methoxychlor	1.28	Spike	P	0 - 30
2101442	Mirex	6.29	Spike	P	0 - 30
2101442	Permethrin	13.9	Spike	P	0 - 30
2101442	Trans-Nonachlor	9.63	Spike	P	0 - 30
2101442	Trifluralin	2.52	Spike	P	0 - 30
LFB	Aldrin	3.06	LCS	P	0 - 30
LFB	Alpha-BHC	1.44	LCS	P	0 - 30
LFB	Alpha-Chlordane	3.69	LCS	P	0 - 30
LFB	Beta-BHC	1.14	LCS	P	0 - 30
LFB	Bifenthrin	8.63	LCS	P	0 - 30
LFB	Carbophenothion	8.82	LCS	P	0 - 30
LFB	Chlorothalonil	10.9	LCS	P	0 - 30
LFB	Cis-Nonachlor	4.15	LCS	P	0 - 30
LFB	Cypermethrin	2.90	LCS	P	0 - 30
LFB	DDD-p,p'	4.23	LCS	P	0 - 30
LFB	DDE-p,p'	2.23	LCS	P	0 - 30
LFB	DDT-p,p'	3.25	LCS	P	0 - 30
LFB	Delta-BHC	7.16	LCS	P	0 - 30
LFB	Dicofol	5.92	LCS	P	0 - 30
LFB	Dieldrin	3.69	LCS	P	0 - 30
LFB	Endosulfan I	0.595	LCS	P	0 - 30
LFB	Endosulfan II	0.00993	LCS	P	0 - 30
LFB	Endosulfan Sulfate	4.36	LCS	P	0 - 30
LFB	Endrin	4.46	LCS	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P366942

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Endrin Aldehyde	5.69	LCS	P	0 - 30
LFB	Endrin Ketone	1.78	LCS	P	0 - 30
LFB	Ethalfluralin	7.57	LCS	P	0 - 30
LFB	Gamma-BHC	4.09	LCS	P	0 - 30
LFB	Gamma-Chlordane	2.78	LCS	P	0 - 30
LFB	Heptachlor	2.66	LCS	P	0 - 30
LFB	Heptachlor Epoxide	1.66	LCS	P	0 - 30
LFB	Hexachlorobenzene	5.46	LCS	P	0 - 30
LFB	Methoxychlor	2.27	LCS	P	0 - 30
LFB	Mirex	1.54	LCS	P	0 - 30
LFB	Permethrin	5.65	LCS	P	0 - 30
LFB	Trans-Nonachlor	4.65	LCS	P	0 - 30
LFB	Trifluralin	3.22	LCS	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P367025

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2101178	Acetochlor	5.02	Spike	P	0 - 30
2101178	Alachlor	4.28	Spike	P	0 - 30
2101178	Ametryn	3.11	Spike	P	0 - 30
2101178	Atrazine	1.81	Spike	P	0 - 30
2101178	Atrazine Desethyl	0.755	Spike	P	0 - 30
2101178	Azinphos Methyl	5.96	Spike	P	0 - 30
2101178	Bromacil	9.25	Spike	P	0 - 30
2101178	Butylate	26.6	Spike	P	0 - 30
2101178	Chlorpyrifos Ethyl	3.44	Spike	P	0 - 30
2101178	Chlorpyrifos Methyl	6.67	Spike	P	0 - 30
2101178	Cyanazine	1.01	Spike	P	0 - 30
2101178	Demeton	1.69	Spike	P	0 - 30
2101178	Diazinon	4.08	Spike	P	0 - 30
2101178	Dimethenamid	13.1	Spike	P	0 - 30
2101178	Disulfoton	1.96	Spike	P	0 - 30
2101178	Dithiopyr	5.98	Spike	P	0 - 30
2101178	EPTC	15.7	Spike	P	0 - 30
2101178	Ethion	23.6	Spike	P	0 - 30
2101178	Ethoprop	1.25	Spike	P	0 - 30
2101178	Fenamiphos	19.5	Spike	P	0 - 30
2101178	Fipronil	7.88	Spike	P	0 - 30
2101178	Fipronil Desulfinyl	7.56	Spike	P	0 - 30
2101178	Fipronil Sulfide	14.5	Spike	P	0 - 30
2101178	Fipronil Sulfone	6.76	Spike	P	0 - 30
2101178	Fonofos	5.42	Spike	P	0 - 30
2101178	Hexazinone	0.441	Spike	P	0 - 30
2101178	Malathion	7.11	Spike	P	0 - 30
2101178	Metalaxyl	5.03	Spike	P	0 - 30
2101178	Metolachlor	1.49	Spike	P	0 - 30
2101178	Metribuzin	2.54	Spike	P	0 - 30
2101178	Mevinphos	4.91	Spike	P	0 - 30
2101178	Molinate	5.98	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P367025

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2101178	Norflurazon	2.07	Spike	P	0 - 30
2101178	Oxadiazon	17.5	Spike	P	0 - 30
2101178	Parathion Ethyl	2.01	Spike	P	0 - 30
2101178	Parathion Methyl	4.67	Spike	P	0 - 30
2101178	Pendimethalin	1.36	Spike	P	0 - 30
2101178	Phorate	17.5	Spike	P	0 - 30
2101178	Prodiamine	11.6	Spike	P	0 - 30
2101178	Prometon	10.4	Spike	P	0 - 30
2101178	Prometryn	3.86	Spike	P	0 - 30
2101178	Simazine	4.98	Spike	P	0 - 30
2101178	Tebuconazole	33.1	Spike	F	0 - 30
2101178	Terbufos	4.43	Spike	P	0 - 30
2101178	Terbuthylazine	3.17	Spike	P	0 - 30
LFB	Acetochlor	18.7	LCS	P	0 - 30
LFB	Alachlor	15.9	LCS	P	0 - 30
LFB	Ametryn	12.2	LCS	P	0 - 30
LFB	Atrazine	20.1	LCS	P	0 - 30
LFB	Atrazine Desethyl	6.29	LCS	P	0 - 30
LFB	Azinphos Methyl	18.2	LCS	P	0 - 30
LFB	Bromacil	14.2	LCS	P	0 - 30
LFB	Butylate	5.79	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	17.9	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	16.2	LCS	P	0 - 30
LFB	Cyanazine	11.8	LCS	P	0 - 30
LFB	Demeton	47.1	LCS	F	0 - 30
LFB	Diazinon	17.3	LCS	P	0 - 30
LFB	Dimethenamid	17.2	LCS	P	0 - 30
LFB	Disulfoton	50.7	LCS	F	0 - 30
LFB	Dithiopyr	16.4	LCS	P	0 - 30
LFB	EPTC	0.703	LCS	P	0 - 30
LFB	Ethion	7.90	LCS	P	0 - 30
LFB	Ethoprop	18.2	LCS	P	0 - 30
LFB	Fenamiphos	17.5	LCS	P	0 - 30
LFB	Fipronil	17.1	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	14.4	LCS	P	0 - 30
LFB	Fipronil Sulfide	13.9	LCS	P	0 - 30
LFB	Fipronil Sulfone	7.28	LCS	P	0 - 30
LFB	Fonofos	16.4	LCS	P	0 - 30
LFB	Hexazinone	9.42	LCS	P	0 - 30
LFB	Malathion	14.0	LCS	P	0 - 30
LFB	Metalaxyl	10.3	LCS	P	0 - 30
LFB	Metolachlor	15.9	LCS	P	0 - 30
LFB	Metribuzin	24.6	LCS	P	0 - 30
LFB	Mevinphos	13.4	LCS	P	0 - 30
LFB	Molinate	13.6	LCS	P	0 - 30
LFB	Norflurazon	17.6	LCS	P	0 - 30
LFB	Oxadiazon	20.3	LCS	P	0 - 30
LFB	Parathion Ethyl	11.3	LCS	P	0 - 30
LFB	Parathion Methyl	11.5	LCS	P	0 - 30
LFB	Pendimethalin	11.0	LCS	P	0 - 30
LFB	Phorate	20.6	LCS	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P367025

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Prodiamine	9.66	LCS	P	0 - 30
LFB	Prometon	17.3	LCS	P	0 - 30
LFB	Prometryn	11.2	LCS	P	0 - 30
LFB	Simazine	14.4	LCS	P	0 - 30
LFB	Tebuconazole	15.5	LCS	P	0 - 30
LFB	Terbufos	23.1	LCS	P	0 - 30
LFB	Terbuthylazine	14.0	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P366942

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2101466	Chlordane	8.10	Spike	P	0 - 30
2101466	Toxaphene	6.01	Spike	P	0 - 30
LFB	Chlordane	0.548	LCS	P	0 - 30
LFB	Toxaphene	1.18	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P366930

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2100814	2,4-D	6.65	Spike	P	0 - 30
2100814	Acetaminophen	2.11	Spike	P	0 - 30
2100814	Bentazon	2.70	Spike	P	0 - 30
2100814	Carbamazepine	3.01	Spike	P	0 - 30
2100814	Diuron	5.59	Spike	P	0 - 30
2100814	Fenuron	5.07	Spike	P	0 - 30
2100814	Fluridone	4.42	Spike	P	0 - 30
2100814	Hydrocodone	23.4	Spike	P	0 - 30
2100814	Ibuprofen	3.96	Spike	P	0 - 30
2100814	Imazapyr	6.21	Spike	P	0 - 30
2100814	Imidacloprid	10.3	Spike	P	0 - 30
2100814	Linuron	5.32	Spike	P	0 - 30
2100814	MCPP	4.11	Spike	P	0 - 30
2100814	Naproxen	3.56	Spike	P	0 - 30
2100814	Primidone	3.04	Spike	P	0 - 30
2100814	Pyraclostrobin	1.55	Spike	P	0 - 30
2100814	Triclopyr	1.40	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P366931

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2102579	3-Hydroxycarbofuran	6.60	Spike	P	0 - 30
2102579	Aldicarb	12.7	Spike	P	0 - 30
2102579	Aldicarb Sulfone	10.1	Spike	P	0 - 30
2102579	Aldicarb Sulfoxide	10.3	Spike	P	0 - 30
2102579	Carbaryl	6.22	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P366931

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2102579	Carbofuran	7.80	Spike	P	0 - 30
2102579	Methiocarb	4.23	Spike	P	0 - 30
2102579	Methomyl	9.41	Spike	P	0 - 30
2102579	Oxamyl	31.4	Spike	F	0 - 30
2102579	Propoxur	6.38	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P367009

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2100814	Acesulfame K	9.15	Spike	P	0 - 30
2100814	AMPA	1.27	Spike	P	0 - 30
2100814	Endothall	5.51	Spike	P	0 - 30
2100814	Glufosinate	0.789	Spike	P	0 - 30
2100814	Glyphosate	2.06	Spike	P	0 - 30
2100814	Sucralose	11.5	Spike	P	0 - 30

Reference Method: SM 2120 B
Batch ID: P366994

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2101338	Color (true)	2.38	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P367446

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2101338	Total Alkalinity	0.427	Sample	P	0 - 2.8

Reference Method: SM 2540 C-97
Batch ID: P367493

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2101327	TDS	7.56	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P367450

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2101338	Fluoride	0.0	Spike	P	0 - 2.5

Reference Method: SM 5310 B-00
Batch ID: P367344

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits

Quality Assurance Report
Precision

Reference Method: SM 5310 B-00
Batch ID: P367344

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2101390	Organic Carbon	0.0737	Spike	P	0 - 20

* Sample, spike and/or laboratory control sample precision (LCS) is reported.
Replicate spike precision may be reported when sample results are below quantifiable levels.

Quality Assurance Report
Surrogates

Lab Sample ID: 2101350
Field Sample ID: G3SD0120

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	79.6	P	30 - 160

Lab Sample ID: 2101351
Field Sample ID: G3SD0067

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	85.9	P	30 - 160

Lab Sample ID: 2101352
Field Sample ID: G3SD0067_DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	80.8	P	30 - 160

Lab Sample ID: 2101353
Field Sample ID: G3SD0120

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	136	P	30 - 160
EPA 8321B	Acetaminophen-d4	96.0	P	30 - 160
EPA 8321B	Carbamazepine-d10	76.1	P	30 - 160
EPA 8321B	Diuron-d6	76.2	P	30 - 160
EPA 8321B	Endothall-d6	112	P	30 - 160
EPA 8321B	Endothall-d6	112	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	46.4	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	46.4	P	30 - 160
EPA 8321B	Ibuprofen-d3	84.5	P	30 - 160
EPA 8321B	Primidone-d5	93.0	P	30 - 160
EPA 8321B	Sucralose-d6	153	P	30 - 160
EPA 8321B	Sucralose-d6	153	P	30 - 160

Lab Sample ID: 2101354
Field Sample ID: G3SD0067

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	109	P	30 - 160
EPA 8321B	Acetaminophen-d4	102	P	30 - 160
EPA 8321B	Carbamazepine-d10	70.6	P	30 - 160
EPA 8321B	Diuron-d6	71.9	P	30 - 160
EPA 8321B	Endothall-d6	53.6	P	30 - 160
EPA 8321B	Endothall-d6	53.6	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	61.7	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	61.7	P	30 - 160
EPA 8321B	Ibuprofen-d3	96.2	P	30 - 160
EPA 8321B	Primidone-d5	89.0	P	30 - 160
EPA 8321B	Sucralose-d6	166	F	30 - 160
EPA 8321B	Sucralose-d6	166	F	30 - 160

Lab Sample ID: 2101355
Field Sample ID: G3SD0067_DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits

Quality Assurance Report
Surrogates

Lab Sample ID: 2101355
Field Sample ID: G3SD0067_DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	129	P	30 - 160
EPA 8321B	Acetaminophen-d4	105	P	30 - 160
EPA 8321B	Carbamazepine-d10	74.1	P	30 - 160
EPA 8321B	Diuron-d6	76.0	P	30 - 160
EPA 8321B	Endothall-d6	75.9	P	30 - 160
EPA 8321B	Endothall-d6	75.9	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	64.3	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	64.3	P	30 - 160
EPA 8321B	Ibuprofen-d3	107	P	30 - 160
EPA 8321B	Primidone-d5	87.6	P	30 - 160
EPA 8321B	Sucralose-d6	68.7	P	30 - 160
EPA 8321B	Sucralose-d6	68.7	P	30 - 160

Lab Sample ID: 2101356
Field Sample ID: G3SD0132

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	143	P	30 - 160
EPA 8321B	Acetaminophen-d4	111	P	30 - 160
EPA 8321B	Carbamazepine-d10	71.5	P	30 - 160
EPA 8321B	Diuron-d6	73.9	P	30 - 160
EPA 8321B	Endothall-d6	106	P	30 - 160
EPA 8321B	Endothall-d6	106	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	75.0	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	75.0	P	30 - 160
EPA 8321B	Ibuprofen-d3	101	P	30 - 160
EPA 8321B	Primidone-d5	97.8	P	30 - 160
EPA 8321B	Sucralose-d6	83.2	P	30 - 160
EPA 8321B	Sucralose-d6	83.2	P	30 - 160

Lab Sample ID: 2101358
Field Sample ID: G3SD0120

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	93.4	P	39 - 109
EPA 8270E	Tetrachloro-m-xylene	76.0	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	65.6	P	30 - 103
EPA 8276	PCNB	89.6	P	37 - 143

Lab Sample ID: 2101359
Field Sample ID: G3SD0067

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	93.3	P	39 - 109
EPA 8270E	Tetrachloro-m-xylene	71.5	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	62.9	P	30 - 103
EPA 8276	PCNB	87.6	P	37 - 143

Lab Sample ID: 2101360
Field Sample ID: G3SD0067_DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits

Quality Assurance Report
Surrogates

Lab Sample ID: 2101360
Field Sample ID: G3SD0067_DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	89.8	P	39 - 109
EPA 8270E	Tetrachloro-m-xylene	70.6	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	65.8	P	30 - 103
EPA 8276	PCNB	87.3	P	37 - 143

Lab Sample ID: 2101361
Field Sample ID: G3SD0120

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	88.3	P	68 - 130
EPA 8270E	Terbufos-d10	136	P	61 - 136

Lab Sample ID: 2101362
Field Sample ID: G3SD0067

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	120	P	68 - 130
EPA 8270E	Terbufos-d10	99.2	P	61 - 136

Lab Sample ID: 2101363
Field Sample ID: G3SD0067_DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	126	P	68 - 130
EPA 8270E	Terbufos-d10	101	P	61 - 136

Quality Assurance Report
Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A92640
Included Lab Sample IDs: 2101318, 2101319, 2101320, 2101327, 2101330

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	99.9	100	P/P	90 - 110
Sulfate	99.5	99.6	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A92685
Included Lab Sample IDs: 2101318, 2101319, 2101320, 2101327, 2101330

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	101	P/P	95 - 105

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A92686
Included Lab Sample IDs: 2101324, 2101325, 2101326, 2101329, 2101332

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	97.7	97.1	P/P	90 - 110
O-Phosphate-P	97.7	97.5	P/P	90 - 110
O-Phosphate-P	97.7	98.5	P/P	90 - 110

Reference Method: SM 2120 B
Run ID: A92687
Included Lab Sample IDs: 2101318, 2101319, 2101320, 2101327, 2101330

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	102	103	P/P	90 - 115
Color (true)	103	103	P/P	90 - 115

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A92703
Included Lab Sample IDs: 2101321, 2101322, 2101323, 2101328, 2101331

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	102	102	P/P	90 - 110
NO2NO3-N	102	104	P/P	90 - 110
NO2NO3-N	104	103	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A92724
Included Lab Sample IDs: 2101353, 2101354, 2101355, 2101356

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	112	114	P/P	60 - 160
Acesulfame K	114	116	P/P	60 - 160
Endothall	85.7	68.3	P/P	60 - 160
Endothall	94.0	85.7	P/P	60 - 160

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A92753
Included Lab Sample IDs: 2101321, 2101322, 2101323, 2101328, 2101331

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits

Quality Assurance Report
Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A92753
Included Lab Sample IDs: 2101321, 2101322, 2101323, 2101328, 2101331

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	102	104	P/P	90 - 110
Total-P	103	103	P/P	90 - 110
Total-P	104	104	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A92756
Included Lab Sample IDs: 2101353, 2101354, 2101355, 2101356

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	104	95.8	P/P	50 - 150
2,4-D	94.1	104	P/P	50 - 150
2,4-D	96.3	94.1	P/P	50 - 150
Acetaminophen	120	120	P/P	60 - 160
Acetaminophen	120	116	P/P	60 - 160
Bentazon	105	86.1	P/P	50 - 160
Bentazon	74.7	113	P/P	50 - 160
Bentazon	86.1	74.7	P/P	50 - 160
Carbamazepine	106	107	P/P	60 - 150
Carbamazepine	107	109	P/P	60 - 150
Diuron	107	107	P/P	60 - 150
Diuron	112	107	P/P	60 - 150
Fenuron	106	101	P/P	60 - 150
Fenuron	99.2	106	P/P	60 - 150
Fluridone	111	113	P/P	60 - 160
Fluridone	113	112	P/P	60 - 160
Hydrocodone	103	107	P/P	60 - 150
Hydrocodone	107	111	P/P	60 - 150
Ibuprofen	113	119	P/P	50 - 160
Ibuprofen	119	96.8	P/P	50 - 160
Imazapyr	106	95.5	P/P	50 - 150
Imazapyr	86.5	106	P/P	50 - 150
Imidacloprid	101	99.3	P/P	60 - 150
Imidacloprid	105	101	P/P	60 - 150
Linuron	104	105	P/P	60 - 150
Linuron	105	104	P/P	60 - 150
MCPP	95.3	105	P/P	50 - 150
MCPP	96.5	95.3	P/P	50 - 150
Naproxen	116	93.6	P/P	50 - 160
Naproxen	93.6	82.6	P/P	50 - 160
Primidone	106	98.4	P/P	60 - 150
Primidone	98.4	100	P/P	60 - 150
Pyraclostrobin	117	114	P/P	60 - 150
Pyraclostrobin	117	117	P/P	60 - 150
Triclopyr	115	91.3	P/P	50 - 150
Triclopyr	92.4	115	P/P	50 - 150

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A92761
Included Lab Sample IDs: 2101321, 2101322, 2101323, 2101328, 2101331

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits

Quality Assurance Report
Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A92761
Included Lab Sample IDs: 2101321, 2101322, 2101323, 2101328, 2101331

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	106	98.2	P/P	90 - 110
Kjeldahl Nitrogen	98.2	100	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A92782
Included Lab Sample IDs: 2101353, 2101354, 2101355, 2101356

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	84.7	89.1	P/P	60 - 160
AMPA	89.1	88.2	P/P	60 - 160
Glufosinate	94.1	94.3	P/P	60 - 160
Glufosinate	94.3	104	P/P	60 - 160
Glyphosate	95.2	97.1	P/P	60 - 160
Glyphosate	97.9	95.2	P/P	60 - 160

Reference Method: SM 5310 B-00
Run ID: A92811
Included Lab Sample IDs: 2101321, 2101322, 2101323, 2101328, 2101331

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	101	101	P/P	90 - 110

Reference Method: EPA 8276
Run ID: A92816
Included Lab Sample IDs: 2101358, 2101359, 2101360

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	96.7		P	80 - 120
Toxaphene	95.1		P	80 - 120

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A92819
Included Lab Sample IDs: 2101365, 2101366, 2101367

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	102	102	P/P	90 - 110
Calcium	99.2	101	P/P	90 - 110
Iron	101	101	P/P	90 - 110
Magnesium	102	101	P/P	90 - 110
Potassium	102	102	P/P	90 - 110
Sodium	102	107	P/P	90 - 110
Zinc	103	103	P/P	90 - 110

Reference Method: SM 2320 B-97
Run ID: A92846
Included Lab Sample IDs: 2101318, 2101319, 2101320, 2101327, 2101330

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	105	102	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: SM 4500 F-C-97
Run ID: A92846
Included Lab Sample IDs: 2101318, 2101319, 2101320, 2101327, 2101330

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	98.6	99.5	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A92848
Included Lab Sample IDs: 2101350, 2101351, 2101352

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	129	128	P/P	60 - 150
Aldicarb	126	123	P/P	60 - 150
Aldicarb Sulfone	128	125	P/P	50 - 150
Aldicarb Sulfoxide	124	125	P/P	50 - 150
Carbaryl	121	122	P/P	60 - 150
Carbofuran	130	131	P/P	50 - 150
Methiocarb	119	127	P/P	50 - 150
Methomyl	131	127	P/P	50 - 150
Oxamyl	129	126	P/P	50 - 150
Propoxur	133	132	P/P	50 - 150

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A92868
Included Lab Sample IDs: 2101365, 2101366, 2101367

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	101	104	P/P	90 - 110
Antimony	102	102	P/P	90 - 110
Arsenic	103	103	P/P	90 - 110
Boron	102	109	P/P	90 - 110
Cadmium	103	104	P/P	90 - 110
Chromium	104	104	P/P	90 - 110
Copper	103	103	P/P	90 - 110
Lead	104	105	P/P	90 - 110
Nickel	102	102	P/P	90 - 110
Selenium	104	104	P/P	90 - 110
Silver	103	104	P/P	90 - 110
Thallium	98.7	99.0	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A92888
Included Lab Sample IDs: 2101358, 2101359, 2101360

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	94.2		P	80 - 120
Alpha-BHC	96.1		P	80 - 120
Alpha-Chlordane	94.2		P	80 - 120
Beta-BHC	97.6		P	80 - 120
Bifenthrin	87.9		P	80 - 120
Carbophenothion	99.7		P	80 - 120
Chlorothalonil	84.6		P	80 - 120
Cis-Nonachlor	91.3		P	80 - 120
Cypermethrin	93.2		P	80 - 120
DDD-p,p'	94.8		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A92888
Included Lab Sample IDs: 2101358, 2101359, 2101360

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
DDE-p,p'	96.1		P	80 - 120
DDT-p,p'	101		P	80 - 120
Delta-BHC	96.4		P	80 - 120
Dicofol	100		P	80 - 120
Dieldrin	96.6		P	80 - 120
Endosulfan I	92.6		P	80 - 120
Endosulfan II	89.3		P	80 - 120
Endosulfan Sulfate	94.4		P	80 - 120
Endrin	89.7		P	80 - 120
Endrin Aldehyde	88.1		P	80 - 120
Endrin Ketone	92.5		P	80 - 120
Ethalfluralin	97.1		P	80 - 120
Gamma-BHC	97.4		P	80 - 120
Gamma-Chlordane	94.5		P	80 - 120
Heptachlor	91.7		P	80 - 120
Heptachlor Epoxide	94.4		P	80 - 120
Hexachlorobenzene	97.5		P	80 - 120
Methoxychlor	96.8		P	80 - 120
Mirex	96.0		P	80 - 120
Permethrin	85.3		P	80 - 120
Trans-Nonachlor	94.1		P	80 - 120
Trifluralin	93.7		P	80 - 120

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A92956
Included Lab Sample IDs: 2101321, 2101322, 2101323, 2101328, 2101331

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	101	100	P/P	90 - 110
Ammonia-N	100	101	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A92989
Included Lab Sample IDs: 2101361, 2101362, 2101363

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	101		P	80 - 120
Alachlor	102		P	80 - 120
Ametryn	96.3		P	80 - 120
Atrazine	101		P	80 - 120
Atrazine Desethyl	90.5		P	80 - 120
Azinphos Methyl	93.4		P	80 - 120
Butylate	97.5		P	80 - 120
Chlorpyrifos Ethyl	98.0		P	80 - 120
Chlorpyrifos Methyl	100		P	80 - 120
Cyanazine	94.0		P	80 - 120
Demeton	97.9		P	80 - 120
Diazinon	101		P	80 - 120
Dimethenamid	103		P	80 - 120
Disulfoton	93.5		P	80 - 120
Dithiopyr	103		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A92989
Included Lab Sample IDs: 2101361, 2101362, 2101363

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
EPTC	101		P	80 - 120
Ethion	98.5		P	80 - 120
Ethoprop	102		P	80 - 120
Fenamiphos	100		P	80 - 120
Fipronil	100		P	80 - 120
Fipronil Desulfinyl	103		P	80 - 120
Fipronil Sulfide	101		P	80 - 120
Fipronil Sulfone	101		P	80 - 120
Fonofos	98.9		P	80 - 120
Hexazinone	99.0		P	80 - 120
Malathion	90.3		P	80 - 120
Metalaxyl	107		P	80 - 120
Metolachlor	105		P	80 - 120
Metribuzin	93.2		P	80 - 120
Mevinphos	100		P	80 - 120
Molinate	99.6		P	80 - 120
Oxadiazon	105		P	80 - 120
Parathion Ethyl	95.0		P	80 - 120
Parathion Methyl	97.4		P	80 - 120
Pendimethalin	99.1		P	80 - 120
Phorate	101		P	80 - 120
Prodiamine	102		P	80 - 120
Prometon	104		P	80 - 120
Prometryn	100		P	80 - 120
Tebuconazole	103		P	80 - 120
Terbufos	98.1		P	80 - 120
Terbuthylazine	102		P	80 - 120

Reference Method: EPA 8270E
Run ID: A93007
Included Lab Sample IDs: 2101361, 2101362, 2101363

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Bromacil	106		P	80 - 120
Norflurazon	98.1		P	80 - 120
Simazine	94.2		P	80 - 120

Reference Method: EPA 8321B
Run ID: A93126
Included Lab Sample IDs: 2101353, 2101354, 2101355, 2101356

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	101	98.5	P/P	60 - 160
Sucralose	117	112	P/P	60 - 160

* Pass/Fail determinations are made for each bracketing calibration verification check.
Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.
Where they are different, both control limits are provided.

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery			Precision		
							LCS	SMP	MS
EPA 180.1 Rev. 2.0	Turbidity							0.749	
EPA 200.7 Rev. 4.4	Barium	102		99.3	100	101			0.701
	Calcium	109		107	104	102			1.79
	Iron	105		104	102	103			1.25
	Magnesium	111		108	107	106			1.28
	Potassium	110		114	113	108			0.977
	Sodium	107		100	103	109			1.22
	Zinc	101		99.9	101	100			0.642
EPA 200.8 Rev. 5.4	Aluminum	102		102	102	102			0.390
	Antimony	101		102	102	102			0.132
	Arsenic	106		104	104	105			0.0823
	Boron	104		105	105	107			0.466
	Cadmium	102		105	105	104			0.723
	Chromium	101		104	104	103			0.100
	Copper	104		104	106	102			1.24
	Lead	104		106	105	105			0.344
	Nickel	105		104	104	102			0.151
	Selenium	104		102	101	103			0.721
	Silver	104		105	105	106			0.141
	Thallium	104		105	107	105			1.62
EPA 300.0 Rev. 2.1	Chloride	101		101	102	101			1.16
	Sulfate	101		101	103	101			1.52
EPA 350.1 Rev. 2.0	Ammonia-N	97.0		94.3	98.4				2.84
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	102		97.6	98.2				0.316
	Kjeldahl Nitrogen	99.7		107	106				0.719
EPA 353.2 Rev. 2.0	NO2NO3-N	103		99.5	100				0.471
	NO2NO3-N	103		99.6	95.6				3.28
EPA 365.1 Rev. 2.0	Total-P	102		107	101				4.06
	Total-P	107							0.197
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	97.8		95.2	96.3				0.804
EPA 8270E	Acetochlor	87.0	105	91.3	96.0		18.7		5.02
	Alachlor	84.6	99.3	86.7	90.5		15.9		4.28
	Aldrin	63.9	65.9	60.4	61.6		3.06		1.98
	Alpha-BHC	122	124	124	128		1.44		3.07
	Alpha-Chlordane	90.2	86.9	84.0	92.4		3.69		9.44
	Ametryn	84.8	95.8	87.3	90.1		12.2		3.11
	Atrazine	89.1	109	102	103		20.1		1.81
	Atrazine Desethyl	128	136	109	110		6.29		0.755
	Azinphos Methyl	98.6	118	97.1	103		18.2		5.96
	Beta-BHC	143	141	166	154		1.14		7.37
	Bifenthrin	79.4	72.8	76.6	81.9		8.63		6.72
	Bromacil	73.6	84.8	73.8	81.0		14.2		9.25
	Butylate	53.1	56.3	48.5	63.4		5.79		26.6
	Carbophenothion	90.3	98.6	131	113		8.82		14.9
	Chlorothalonil	147	132	175	159		10.9		9.95
	Chlorpyrifos Ethyl	85.0	102	93.3	96.6		17.9		3.44
	Chlorpyrifos Methyl	91.5	108	92.9	99.3		16.2		6.67
	Cis-Nonachlor	88.5	84.9	81.2	92.2		4.15		12.7
	Cyanazine	169	190	186	188		11.8		1.01
	Cypermethrin	83.8	81.4	79.3	89.0		2.90		11.6
	DDD-p,p'	99.3	95.2	95.2	106		4.23		10.4
	DDE-p,p'	89.5	87.5	85.7	94.0		2.23		9.25
	DDT-p,p'	120	116	114	119		3.25		5.05
	Delta-BHC	152	142	171	172		7.16		0.214

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision		
						LCS	SMP	MS
EPA 8270E	Demeton	49.5	80.0	79.2	77.9	47.1		1.69
	Diazinon	101	121	111	107	17.3		4.08
	Dicofol	98.6	92.9	90.0	92.8	5.92		3.10
	Dieldrin	99.1	95.5	93.8	102	3.69		8.47
	Dimethenamid	73.2	87.0	72.5	82.7	17.2		13.1
	Disulfoton	55.6	93.4	92.6	90.8	50.7		1.96
	Dithiopyr	89.6	106	91.5	97.1	16.4		5.98
	Endosulfan I	95.6	95.1	94.9	100	0.595		5.62
	Endosulfan II	102	102	103	111	0.0099		7.51
	Endosulfan Sulfate	94.3	90.3	87.5	94.3	4.36		7.44
	Endrin	95.7	91.5	95.7	108	4.46		12.1
	Endrin Aldehyde	104	97.9	93.1	101	5.69		8.44
	Endrin Ketone	90.5	88.9	93.2	98.5	1.78		5.49
	EPTC	53.1	52.7	55.8	65.2	0.703		15.7
	Ethalfluralin	107	99.2	103	109	7.57		5.34
	Ethion	52.5	56.9	37.9	48.1	7.90		23.6
	Ethoprop	89.7	108	99.2	100	18.2		1.25
	Fenamiphos	75.3	89.7	77.2	93.9	17.5		19.5
	Fipronil	88.2	105	89.9	97.3	17.1		7.88
	Fipronil Desulfinyl	80.0	92.4	82.3	88.8	14.4		7.56
	Fipronil Sulfide	80.3	92.3	76.5	88.4	13.9		14.5
	Fipronil Sulfone	69.1	74.4	73.9	79.0	7.28		6.76
	Fonofos	95.6	113	103	109	16.4		5.42
	Gamma-BHC	129	135	147	149	4.09		1.19
	Gamma-Chlordane	86.1	83.8	80.5	88.8	2.78		9.76
	Heptachlor	77.7	75.7	70.7	73.9	2.66		4.41
	Heptachlor Epoxide	93.9	92.4	90.3	97.4	1.66		7.49
	Hexachlorobenzene	83.0	78.6	74.1	80.7	5.46		8.55
	Hexazinone	93.9	103			9.42		0.441
	Malathion	83.6	96.2	81.7	87.7	14.0		7.11
	Metalaxyl	90.2	100	90.9	95.5	10.3		5.03
	Methoxychlor	132	129	129	131	2.27		1.28
	Metolachlor	79.2	92.8	83.1	84.3	15.9		1.49
	Metribuzin	171	218	217	222	24.6		2.54
	Mevinphos	84.4	96.5	93.6	89.1	13.4		4.91
	Mirex	65.4	64.4	61.3	65.3	1.54		6.29
	Molinate	66.2	75.8	74.8	79.4	13.6		5.98
	Norflurazon	83.1	99.2	87.7	89.5	17.6		2.07
	Oxadiazon	78.6	96.4	71.1	84.8	20.3		17.5
	Parathion Ethyl	87.7	98.1	92.3	94.2	11.3		2.01
	Parathion Methyl	95.3	107	92.1	96.5	11.5		4.67
	Pendimethalin	86.0	96.1	93.6	94.9	11.0		1.36
	Permethrin	67.1	63.4	62.7	72.0	5.65		13.9
	Phorate	69.7	85.7	91.2	76.6	20.6		17.5
	Prodiamine	39.3	43.3	44.3	49.8	9.66		11.6
	Prometon	74.2	88.2	75.3	83.5	17.3		10.4
	Prometryn	83.9	93.9	85.8	89.2	11.2		3.86
	Simazine	104	120	99.4	105	14.4		4.98
	Tebuconazole	50.7	59.3	36.7	51.2	15.5		33.1
	Terbufos	84.0	106	104	99.5	23.1		4.43
	Terbuthylazine	87.6	101	92.4	95.4	14.0		3.17
	Trans-Nonachlor	85.8	82.0	81.1	89.3	4.65		9.63
	Trifluralin	103	99.8	98.6	101	3.22		2.52
EPA 8276	Chlordane	85.4	85.9	103	112	0.548		8.10

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision		
						LCS	SMP	MS
EPA 8276	Toxaphene	72.0	71.2	77.2	82.0	1.18		6.01
EPA 8321B	2,4-D	135		118	130			6.65
	3-Hydroxycarbofuran	101		91.0	85.2			6.60
	Acesulfame K	112		103	114			9.15
	Acetaminophen	93.3		95.7	97.8			2.11
	Aldicarb	112		67.3	76.5			12.7
	Aldicarb Sulfone	105		101	91.6			10.1
	Aldicarb Sulfoxide	72.0		47.6	43.0			10.3
	AMPA	90.0		46.6	43.8			1.27
	Bentazon	96.7		116	107			2.70
	Carbamazepine	90.2		73.8	76.4			3.01
	Carbaryl	85.9		62.1	57.3			6.22
	Carbofuran	105		78.1	72.2			7.80
	Diuron	88.7		64.1	68.6			5.59
	Endothall	115		83.0	87.7			5.51
	Fenuron	98.6		76.5	80.4			5.07
	Fluridone	94.9		75.1	79.7			4.42
	Glufosinate	108		72.5	73.0			0.789
	Glyphosate	95.9		104	92.5			2.06
	Hydrocodone	94.7		75.3	95.3			23.4
	Ibuprofen	98.5		83.9	80.7			3.96
	Imazapyr	74.0						6.21
	Imidacloprid	91.4		146	169			10.3
	Linuron	75.0		56.7	59.8			5.32
	MCPP	146		153	160			4.11
	Methiocarb	80.0		70.0	67.1			4.23
	Methomyl	85.9		60.9	66.9			9.41
	Naproxen	90.0		89.2	86.0			3.56
	Oxamyl	99.9		97.7	71.2			31.4
	Primidone	89.4		90.7	93.5			3.04
	Propoxur	95.3		70.7	66.3			6.38
	Pyraclostrobin	95.3		88.2	89.5			1.55
	Sucralose	46.7		76.6	86.9			11.5
	Triclopyr	139		133	131			1.40
SM 2120 B	Color (true)	102					2.38	
SM 2320 B-97	Total Alkalinity	104					0.427	
SM 2540 C-97	TDS						7.56	
SM 4500 F-C-97	Fluoride	98.0		96.8	96.8			0.0
SM 5310 B-00	Organic Carbon	99.2		101	101			0.0737

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2101318, 2101319, 2101320, 2101327, 2101330
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2101365, 2101366, 2101367
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2101365, 2101366, 2101367
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2101318, 2101319, 2101320, 2101327, 2101330
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2101318, 2101319, 2101320, 2101327, 2101330

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2101321, 2101322, 2101323, 2101328, 2101331
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2101321, 2101322, 2101323, 2101328, 2101331
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2101321, 2101322, 2101323, 2101328, 2101331
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2101321, 2101322, 2101323, 2101328, 2101331
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2101324, 2101325, 2101326, 2101329, 2101332
EPA 8270E / E31780	Organochlorine pesticides in water matrices by GC/MS-SIM	2101358, 2101359, 2101360
EPA 8270E / E31780	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2101361, 2101362, 2101363
EPA 8276 / E31780	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2101358, 2101359, 2101360
EPA 8321B / E31780	Carbamates in water matrices by HPLC/MS/MS	2101350, 2101351, 2101352
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2101353, 2101354, 2101355, 2101356
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	2101353, 2101354, 2101355, 2101356
SM 2120 B / E31780	True Color measured at 450 nm	2101318, 2101319, 2101320, 2101327, 2101330
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	2101318, 2101319, 2101320, 2101327, 2101330
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2101318, 2101319, 2101320, 2101327, 2101330
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2101318, 2101319, 2101320, 2101327, 2101330
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2101318, 2101319, 2101320, 2101327, 2101330
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2101321, 2101322, 2101323, 2101328, 2101331

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	07/10/2019			07/10/2019 16:04	Adrian Shelby	2101318, 2101319, 2101320, 2101327, 2101330
EPA 200.7 Rev. 4.4	07/10/2019	07/11/2019 15:55	Elliott D. Healy	07/16/2019 13:22	Betina Topolski	2101365
	07/10/2019	07/11/2019 15:55	Elliott D. Healy	07/16/2019 13:30	Betina Topolski	2101366
	07/10/2019	07/11/2019 15:55	Elliott D. Healy	07/16/2019 13:36	Betina Topolski	2101367
EPA 200.8 Rev. 5.4	07/10/2019	07/11/2019 15:55	Elliott D. Healy	07/17/2019 18:18	Robert K Palmer	2101365
	07/10/2019	07/11/2019 15:55	Elliott D. Healy	07/17/2019 18:28	Robert K Palmer	2101366
	07/10/2019	07/11/2019 15:55	Elliott D. Healy	07/17/2019 18:38	Robert K Palmer	2101367
EPA 300.0 Rev. 2.1	07/10/2019			07/12/2019 15:09	Jhamieka S. Greenwood	2101318
	07/10/2019			07/12/2019 15:21	Jhamieka S. Greenwood	2101319
	07/10/2019			07/12/2019 15:33	Jhamieka S. Greenwood	2101320
	07/10/2019			07/12/2019 15:46	Jhamieka S. Greenwood	2101327
	07/10/2019			07/12/2019 15:58	Jhamieka S. Greenwood	2101330
EPA 350.1 Rev. 2.0	07/10/2019			07/22/2019 16:25	Julia Storbeck	2101321
	07/10/2019			07/22/2019 16:30	Julia Storbeck	2101322
	07/10/2019			07/22/2019 16:31	Julia Storbeck	2101323
	07/10/2019			07/22/2019 16:39	Julia Storbeck	2101328
	07/10/2019			07/22/2019 16:40	Julia Storbeck	2101331
EPA 351.2 Rev. 2.0	07/10/2019	07/12/2019 11:55	Sima Feizi	07/15/2019 10:53	Virginia P. Brown	2101321
	07/10/2019	07/12/2019 11:55	Sima Feizi	07/15/2019 10:58	Virginia P. Brown	2101322
	07/10/2019	07/12/2019 11:55	Sima Feizi	07/15/2019 10:59	Virginia P. Brown	2101323
	07/10/2019	07/12/2019 11:55	Sima Feizi	07/15/2019 11:09	Virginia P. Brown	2101328
	07/10/2019	07/12/2019 11:55	Sima Feizi	07/15/2019 11:10	Virginia P. Brown	2101331
EPA 353.2 Rev. 2.0	07/10/2019			07/11/2019 12:00	Beverly Y. Sanders	2101331
	07/10/2019			07/11/2019 12:29	Beverly Y. Sanders	2101328
	07/10/2019			07/11/2019 12:44	Beverly Y. Sanders	2101321
	07/10/2019			07/11/2019 12:45	Beverly Y. Sanders	2101322
	07/10/2019			07/11/2019 12:47	Beverly Y. Sanders	2101323
EPA 365.1 Rev. 2.0	07/10/2019	07/12/2019 12:55	Sima Feizi	07/15/2019 08:36	Lipi Saha	2101321
	07/10/2019	07/12/2019 12:55	Sima Feizi	07/15/2019 08:49	Lipi Saha	2101322
	07/10/2019	07/12/2019 12:55	Sima Feizi	07/15/2019 08:50	Lipi Saha	2101323
	07/10/2019	07/12/2019 12:55	Sima Feizi	07/15/2019 08:56	Lipi Saha	2101328
	07/10/2019	07/12/2019 12:55	Sima Feizi	07/15/2019 09:40	Lipi Saha	2101331
EPA 365.1 Rev. 2.0 dissolved	07/10/2019			07/10/2019 16:36	Jhamieka S. Greenwood	2101325
	07/10/2019			07/10/2019 16:37	Jhamieka S. Greenwood	2101326
	07/10/2019			07/10/2019 17:01	Jhamieka S. Greenwood	2101324
	07/10/2019			07/10/2019 17:26	Jhamieka S. Greenwood	2101329
	07/10/2019			07/10/2019 17:28	Jhamieka S. Greenwood	2101332
EPA 8270E	07/10/2019	07/12/2019 08:30	Rasheda Ghaffari	07/16/2019 16:42	Vandana T. Nagar	2101361
	07/10/2019	07/12/2019 08:30	Rasheda Ghaffari	07/16/2019 17:06	Vandana T. Nagar	2101362

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8270E	07/10/2019	07/12/2019 08:30	Rasheda Ghaffari	07/16/2019 17:30	Vandana T. Nagar	2101363
	07/10/2019	07/12/2019 08:30	Rasheda Ghaffari	07/17/2019 16:03	Vandana T. Nagar	2101361
	07/10/2019	07/12/2019 08:30	Rasheda Ghaffari	07/17/2019 16:27	Vandana T. Nagar	2101361
	07/10/2019	07/12/2019 08:30	Rasheda Ghaffari	07/17/2019 16:58	Vandana T. Nagar	2101362
	07/10/2019	07/12/2019 08:30	Rasheda Ghaffari	07/17/2019 17:22	Vandana T. Nagar	2101363
	07/10/2019	07/12/2019 09:00	Fe-Val Siddell	07/18/2019 22:34	Arthur Maknenko	2101358
	07/10/2019	07/12/2019 09:00	Fe-Val Siddell	07/18/2019 23:06	Arthur Maknenko	2101359
	07/10/2019	07/12/2019 09:00	Fe-Val Siddell	07/18/2019 23:38	Arthur Maknenko	2101360
EPA 8276	07/10/2019	07/12/2019 09:00	Fe-Val Siddell	07/16/2019 05:49	Dinesh Mishra	2101358
	07/10/2019	07/12/2019 09:00	Fe-Val Siddell	07/16/2019 06:44	Dinesh Mishra	2101359
	07/10/2019	07/12/2019 09:00	Fe-Val Siddell	07/16/2019 07:39	Dinesh Mishra	2101360
EPA 8321B	07/10/2019	07/11/2019 09:15	Rebecca Ware	07/11/2019 21:31	Rebecca Ware	2101353
	07/10/2019	07/11/2019 09:15	Rebecca Ware	07/11/2019 21:45	Rebecca Ware	2101354
	07/10/2019	07/11/2019 09:15	Rebecca Ware	07/11/2019 22:12	Rebecca Ware	2101355
	07/10/2019	07/11/2019 09:15	Rebecca Ware	07/11/2019 22:26	Rebecca Ware	2101356
	07/10/2019	07/11/2019 09:15	Rebecca Ware	07/12/2019 15:35	Rebecca Ware	2101353
	07/10/2019	07/11/2019 09:15	Rebecca Ware	07/12/2019 15:46	Rebecca Ware	2101354
	07/10/2019	07/11/2019 09:15	Rebecca Ware	07/12/2019 16:23	Rebecca Ware	2101355
	07/10/2019	07/11/2019 09:15	Rebecca Ware	07/12/2019 16:34	Rebecca Ware	2101356
	07/10/2019	07/11/2019 09:15	Rebecca Ware	07/25/2019 20:13	Rebecca Ware	2101355
	07/10/2019	07/11/2019 09:15	Rebecca Ware	07/25/2019 20:25	Rebecca Ware	2101356
	07/10/2019	07/11/2019 09:15	Rebecca Ware	07/26/2019 14:48	Rebecca Ware	2101353
	07/10/2019	07/11/2019 09:15	Rebecca Ware	07/26/2019 15:00	Rebecca Ware	2101354
	07/10/2019	07/11/2019 10:00	Hoor Shaik	07/12/2019 08:17	Juyoung Kim	2101353
	07/10/2019	07/11/2019 10:00	Hoor Shaik	07/12/2019 08:51	Juyoung Kim	2101354
	07/10/2019	07/11/2019 10:00	Hoor Shaik	07/12/2019 10:01	Juyoung Kim	2101355
	07/10/2019	07/11/2019 10:00	Hoor Shaik	07/12/2019 10:35	Juyoung Kim	2101356
	07/10/2019	07/11/2019 10:00	Hoor Shaik	07/12/2019 18:39	Juyoung Kim	2101354
	07/10/2019	07/11/2019 10:00	Hoor Shaik	07/12/2019 19:14	Juyoung Kim	2101355
	07/10/2019	07/15/2019 09:00	Hoor Shaik	07/18/2019 04:36	Juyoung Kim	2101350
	07/10/2019	07/15/2019 09:00	Hoor Shaik	07/18/2019 05:11	Juyoung Kim	2101351
	07/10/2019	07/15/2019 09:00	Hoor Shaik	07/18/2019 05:45	Juyoung Kim	2101352
SM 2120 B	07/10/2019			07/10/2019 17:38	Madeline Funaro	2101318
	07/10/2019			07/10/2019 17:41	Madeline Funaro	2101330
	07/10/2019			07/10/2019 17:54	Madeline Funaro	2101319
	07/10/2019			07/10/2019 17:55	Madeline Funaro	2101320
	07/10/2019			07/10/2019 17:56	Madeline Funaro	2101327
SM 2320 B-97	07/10/2019			07/17/2019 03:29	Dale L. Simmons	2101318
	07/10/2019			07/17/2019 03:42	Dale L. Simmons	2101319
	07/10/2019			07/17/2019 03:55	Dale L. Simmons	2101320

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 2320 B-97	07/10/2019			07/17/2019 04:07	Dale L. Simmons	2101327
	07/10/2019			07/17/2019 04:20	Dale L. Simmons	2101330
SM 2540 C-97	07/10/2019			07/15/2019 15:02	Yijie Li	2101318, 2101319, 2101320, 2101327, 2101330
SM 2540 D-97	07/10/2019			07/15/2019 15:02	Yijie Li	2101318, 2101319, 2101320, 2101327, 2101330
SM 4500 F-C-97	07/10/2019			07/17/2019 03:29	Dale L. Simmons	2101318
	07/10/2019			07/17/2019 03:42	Dale L. Simmons	2101319
	07/10/2019			07/17/2019 03:55	Dale L. Simmons	2101320
	07/10/2019			07/17/2019 04:07	Dale L. Simmons	2101327
	07/10/2019			07/17/2019 04:20	Dale L. Simmons	2101330
SM 5310 B-00	07/10/2019			07/15/2019 21:38	Madeline Funaro	2101321
	07/10/2019			07/15/2019 21:50	Madeline Funaro	2101322
	07/10/2019			07/15/2019 22:02	Madeline Funaro	2101323
	07/10/2019			07/15/2019 22:14	Madeline Funaro	2101328
	07/10/2019			07/15/2019 22:26	Madeline Funaro	2101331